Regional Market Opportunity Analysis for Andersen Consulting

Pacific Region Practice

INPUT

Regional Market Opportunity Analysis for Andersen Consulting

Pacific Region Practice

Prepared by INPUT

for

Andersen Consulting

May 1993

INPUT®

1280 Villa Street • Mountain View, CA 94041 • Tel. (415) 961-3300 • Fax (415) 961-3966

Published by
INPUT
1280 Villa Street
Mountain View, CA 94041-1194
U.S.A.

Regional Market Opportunity Analysis for Andersen Consulting—Pacific Region Practice

Printed in the United States of America.

ZAN • 635 • 1993

Table of Contents

I

Executive Summary

A.

Objectives/Survey Methodology

The objective of this study was to supply Andersen Consulting with information concerning opportunities to provide business integration, systems integration, and professional services to organizations within Andersen's Pacific Practice Region. To this end, INPUT interviewed 154 IS VP/managers of organizations within the specified region to obtain an understanding of how the IS infrastructure is changing, discover what types skill-sets are necessary to successfully execute the change, and assess the opportunity for outside service firms to assist with the change.

Within this *Regional Opportunity Analysis* organizations are segmented by revenue into the following groups:

- Group 1: $100 million to $500 million
- Group 2: $500 million and $1 billion
- Group 3: $1 billion to $10 billion
- Group 4: over $10 billion

Comparisons between Groups 1-4 and Groups 2-4 are conducted for two reasons: i) the former grouping represents a larger sample size than the latter grouping (135 as opposed to 72), and thus exemplifies overall industry trends with a higher degree of accuracy; ii) Group 2-4 (organizations generating more than $500 million in annual revenue) represents Andersen's target market, and therefore offered issues that are of direct importance to Andersen.

Note: the statistical analysis is based on actual responses. As usual, in some instances organizations refused to answer a particular question.

B.

Summary And Conclusions

More than half of the 127 (actual responses) organizations that generate annual revenue in excess of $100 million plan to re-architect their computing environment during the next two years (refer to *Exhibit I-1*). Not surprisingly, the percent of organizations with computing environment change plans directly correlated with an organization's annual revenue amount; 57 percent of the organizations in excess of $500 million, and 62 percent of the organizations in excess of $1 billion had plans. This relationship makes sense, given

that the larger, older organizations that required high-level computing power in order to accomplish company-wide business tasks utilized the only available solution at the time, the mainframe . On the other hand, the smaller, younger organizations grew-up in an environment where minicomputers and local area networks offered viable computing solutions.

Downsizing the IS architecture from a hierarchical topology to a distributed topology was the dominant factor within the computing environment re-architecture plans. However, despite the fact that over half of the organizations had IS migration plans, the survey results also indicated that the in-house IS staff was not prepared to handle all of the complex details that the plans required. Details that include integrating the remnant hosts (legacy systems) into a larger network as a server.

Barriers to completing the computing environment re-architecture on a timely basis include:

- Under-staffed
- Security issues
- Under-estimating funding
- Lack of software applications
- Hardware connectivity problems
- Lack of in-house technological skill-sets

The IS department's lack of new technology skills presents outside service firms with an opportunity to assist organizations in the IS planning process, managing and executing the change, and re-training the organization.

Receptiveness to outside services was the greatest in Group-2 organizations, where 60 percent of respondents have or would use external assistance (Group-1, 35 percent; Group-3, 33 percent; Group-4, sample was too small for conclusions).

Insight into the sales opportunity for service providers is gained by discovering the percent of companies that are planning to re-architect their computer environment within the next two years *and* are receptive to external company assistance. Thirty-four percent of the organization within Groups 2 - 4 fall into this category (refer to *Exhibit III-3*). Furthermore, 40 percent of the Products Industry organizations also have these characteristics (refer to *Exhibit III-4*).

The types of services that are demanded by Group 2-4 organizations include (refer to part A in *Exhibit III-7*):

- Integrating/upgrading networks (82 percent)
- Developing new applications (79 percent)
- Integrating existing applications (79 (percent)

Part B in Exhibit III-7 illustrates receptiveness to outsides service firms by organizations that are actually planning to fulfill a particular service requirement. For example, 82 percent of the Group 2-4 organizations plan to integrate/upgrade their network (Part A), and of these organizations 36 percent plan to utilize outside services (Part B).

An interesting issue surfaced when comparing the responses pertaining to computing environment re-architecture plans with the responses for near-future requirement plans. Although 42 percent of the Group 2-4 organizations responded that they *did not* have plans to re-architect their computing environment, 20 percent of the same sample responded that they *do have* plans to develop strategic systems/architecture (refer to *Exhibit III-9*).

Thus, organizations that responded that they are receptive to the use of outside service firms, but had no immediate plans to re-architect their computing environment, are also possible sales prospects (refer to Exhibit *III-4*, companies that fall above the x-axis are in this sales prospect category).

In addition to expanding the sales opportunity to include organizations that appear in the upper two quadrants in Exhibit III-4 this apparent response inconsistency underscores the confusion over terminology that attempts to accurately describe computing environment changes. This confusion is important to recognize during the selling process.

The skill-sets that organizations say are important, in terms of influencing the selection of an outside service firm, include: client/server expertise, technology strategy expertise, and expertise pertaining to LANS/WANS (refer to Exhibit III-10). These skill-sets support the responses pertaining to requirement fulfillment needs (integrating/upgrading networks, developing new applications, etc.).

The ultimate qualifier associated with the sales opportunity is whether or not the target organization has the budget dollars to spend. The average 1993 IS budget, pertaining to organizations with revenue in excess of $1 billion, amounted to $20 million. Overall, the IS budget growth is flat, however, organizations are spending in places of need. A portion of the organizations with over $500 million in revenue plan to increase their IS spending in the following areas (refer to Exhibit *III-13*):

- Systems integration (41 percent of the responses)
- Consulting Services (34 percent of the responses)

- Business Integration (28 percent)

The systems integration market within Andersen Consulting's Pacific Region will increase from $2.0 billion in 1992 to $4.1 billion in 1997, a CAGR of 16 percent. The professional services market within this same region will grow from $3.8 billion in 1992 to $5.7 billion in 1997, a CAGR of 9 percent. California represents over half of the market for both types of services.

Exhibit I-1

Results Summary
(Groups 1-4)

		Yes, Plans During Next 3 Years					Ranking: 1 = Low - 5 = High					Pacific Region Practice: 1992 Market Size** ($ Millions)	
Industry Practice	Sample Size*	Would Use Outside Service Firm	Re-architecting Computer Environment	Re-engineering Business Processes	Integrating/Upgrading Networks	Downsizing Existing Applications	Client/Server Expertise	Technology Strategy Expertise	Business Strategy Expertise	Organization Change Expertise	Business Process Design/Re-design Expertise	Systems Integration	Professional Services
Products	73	37%	50%	66%	76%	51%	4.0	3.8	3.3	2.3	3.3	$510	$1,600
Financial Services	10	50%	60%	67%	56%	25%	3.7	3.8	3.3	3.0	3.3	$100	$560
Telecom	3	33%	50%	100%	100%	66%	4.7	4.7	4.3	4.0	4.7	$40	$190
Government	27	35%	29%	52%	89%	62%	3.5	3.6	3.0	3.1	3.0	$1,150	$1,300
Health Care	9	78%	78%	56%	86%	44%	3.3	3.9	3.2	3.4	3.1	$50	$55
Utilities	10	50%	67%	70%	80%	30%	4.1	3.9	3.4	3.3	4.1	$120	$65
Misc. Industries	--	--	--	--	--	--	--	--	--	--	--	$2	$30
Total Industry	132	41%	50%	63%	79%	50%	3.7	3.8	3.3	3.0	3.4	$2,000	$3,750

* Reflects the interview as a whole, the response rate varies for each question
** Numbers reflect rounding

ZAN

II

Introduction

Objectives

- Establish market sizes for the professional services and systems integration markets within the geographic region of Andersen Consulting's Pacific Region Practice

- Determine the five year (1992 - 1997) market forecast for these markets

- Identify the similarities and differences among the geographic areas within the Pacific Region Practice for the professional services and systems integration markets within specific vertical industries

- Specifically analyze issues and trends pertaining to the future of *legacy systems* and "business integration"

Project Approach

- 154 IS VP/manager interviews were conducted within different states of the Pacific Region Practice to asses:
  - Computing environment trends
  - Requirements needs of the organization, from the point of view of the IS VP/manager
  - Opportunity for outside services firms to assist in-house business and technology planning
  - IS Budget assessment

Project Approach

- INPUT's 1992- 1997 U.S. market forecast was segmented by:
  - Systems integration and professional services markets
  - Industry Group
  - Region
  - Market forecast was adjusted using: i) data from Computer Intelligence Corp.; ii) project survey results; iii) and INPUT market expertise

Project Approach

- Andersen Consulting's Industry Practices and INPUT's vertical industries correlate with each other as follows:

Andersen's Industry Practices	INPUT's Vertical Industries
Products	- Business Services - Consumer Services - Discrete Manufacturing - Process Manufacturing - Retail Distribution - Wholesale Distribution
Financial Services	- Banking & Finance - Insurance
Telecom Industry Group	- Telecommunications
Government	- State/Local Government - Education
Healthcare	- Medical
Utilities	- Utilities

III

Field Research

SAMPLE CHARACTERISTICS

Regional Sample Segmentation

Table III-1

Area	Metropolitan Areas	Number of Interviews
Arizona	Phoenix	16
California (Northern)	San Francisco, San Jose, Oakland	28
California (Southern)	Los Angeles	25
Colorado	Denver	10
Idaho	Boise	6
Montana	Helena	8
Nevada	Las Vegas, Reno	7
New Mexico	Albuquerque	6
Oregon	Portland	5
Utah	Salt Lake City	9
Washington	Seattle	27
Wyoming	Cheyenne	7
Pacific Region		154

Revenue Grouping for Sample Companies

- Group - 4: Organizations with revenue over $10 billion
- Group - 3: Organizations with revenue between $1 billion and $10 billion
- Group - 2: Organizations with revenue between $500 million and $1 billion
- Group - 1: Organizations with revenue between $100 million and $500 million
- Group - 0: Organizations with under $100 million in revenue

Sample Segmentation: By Revenue Group

Table III-2

Employees	Missing*	Group - 0 Under $100M	Group - 1 $100M to $500M	Group - 2 $500M to $1B	Group - 3 $1B to $10B	Group - 4 Over $10B	Total Responses
Missing	0	0	2	0	0	0	2
Under 500	2	10	14	2	1	0	29
500 to 1,000	1	0	19	4	3	0	27
1,000 to 5,000	4	0	21	13	8	1	47
5,000 to 10,000	0	0	7	8	7	1	23
Over 10,000	2	0	0	5	17	2	26
Total	9	10	63	32	36	4	154

* Government agencies that are unsure of the revenue generation

Sample Segmentation: By Industry Group

Table III-3

INDUSTRY	Total Sample			Group 2 - 4		
PRACTICE	California	RoR*	Total	California	RoR*	Total
PRODUCTS	36	44	80	29	12	41
Business Services	4	4	8	3	1	4
Discrete Manufacturing	16	7	23	14	2	16
Process Manufacturing	9	12	21	7	4	11
Retail Distribution	2	5	7	1	0	1
Transportation	1	1	2	1	0	1
Wholesale Distribution	4	15	19	3	5	8
FINANCIAL SERVICES	5	8	13	4	2	6
Banking/Finance	4	2	6	3	0	3
Insurance	1	6	7	1	2	3
TELECOM	0	3	3	0	3	3
GOVERNMENT	6	29	35	5	7	12
Federal Government	3	4	7	2	0	2
State/Local	1	14	15	1	2	3
Education	2	11	13	2	5	7
HEALTHCARE	3	7	10	2	0	2
UTILITIES	2	8	10	1	5	6
MISCELLANEOUS	1	2	3	1	1	2
TOTAL INDUSTRY	53	101	154	42	30	72

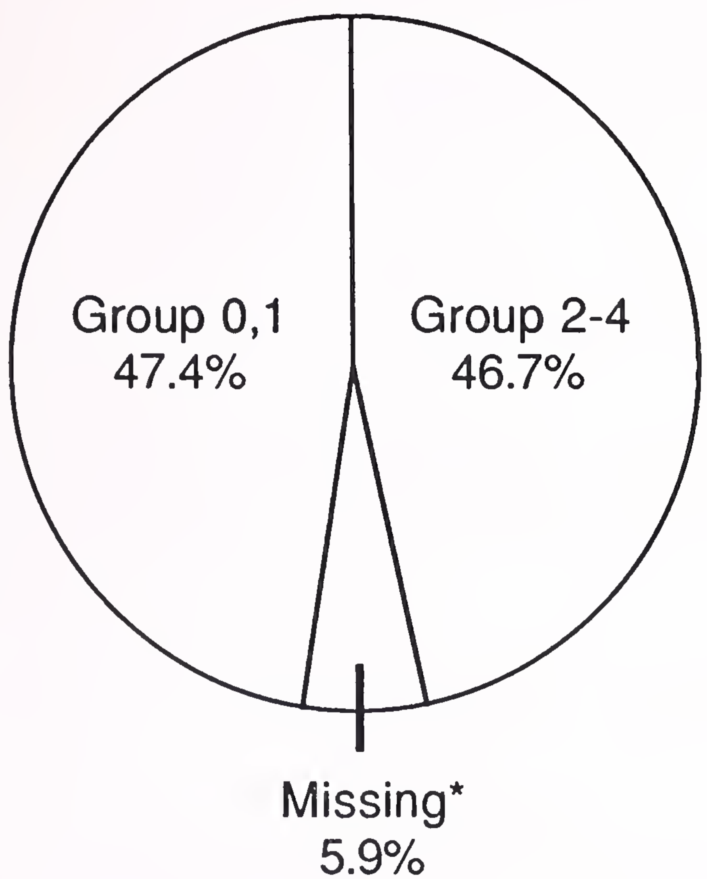
*RoR = Rest of Region (AZ, CO, ID, MT, NM, NV, OR, UT, WA, WY).

Sample Size Observations

- The total sample size amounts to 154 interviews
- Interviews conducted in California represent 34 percent of the total sample size and 58 percent of the Group 2 - 4 portion of the sampling
- Total sample segment for Groups 2 - 4 represents 72 interviews
- The Products Industry Group represents 52 percent of the total sample size and 57 percent of the Group 2 - 4 portion of the sampling
- The statistical analysis is based on actual responses. As usual, in some instances organizations refused to answer a particular question

EXHIBIT III-1

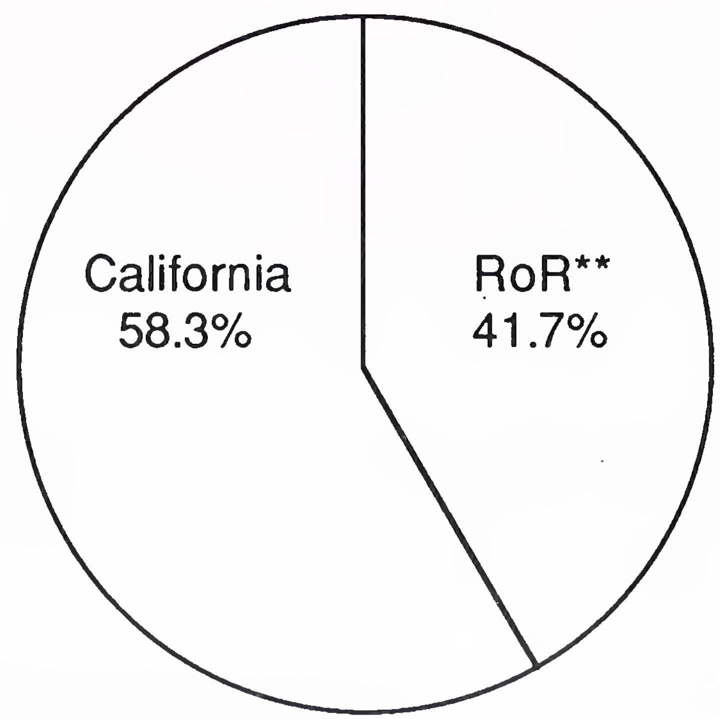
Total Sample Segmentation by Revenue Grouping



154 Responses

* Government agencies unsure of revenue generation

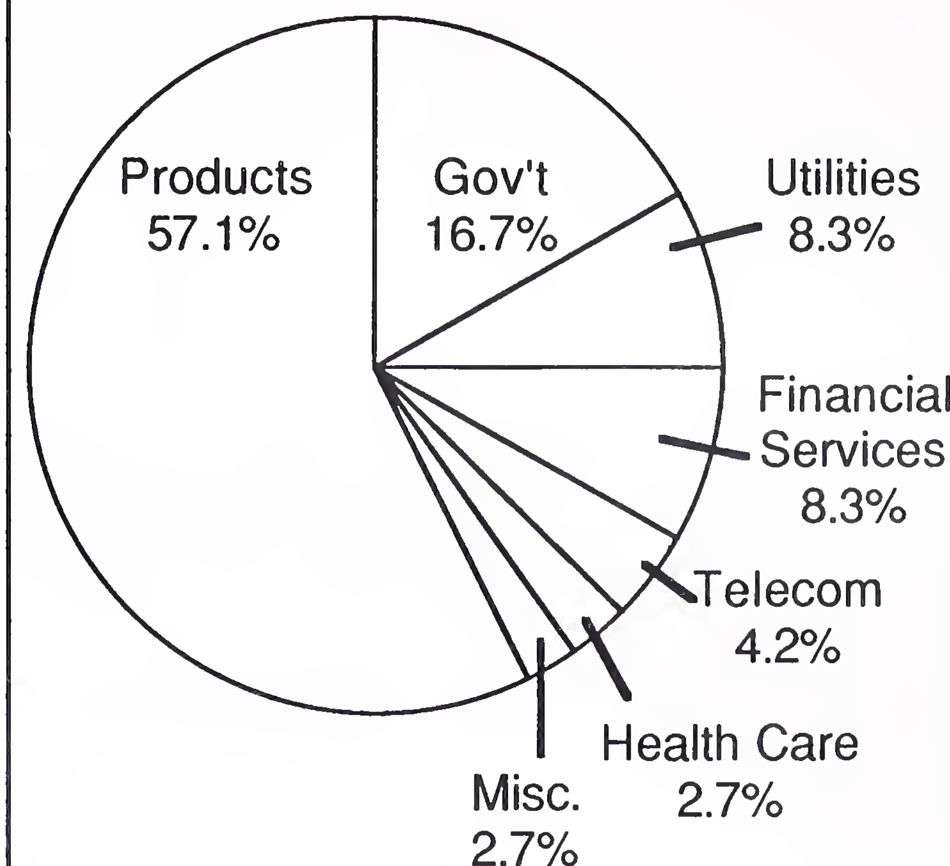
Pacific Region Segmentation for Sample Groups 2-4



72 Responses

** RoR = Rest of Region (AZ, CO, ID, MT, NV, OR, UT, WA, WY)

Industry Practice Segmentation for Sample Groups 2-4



72 Responses

COMPUTING ENVIRONMENT

Computing Environment Observations

- Percent of organizations that plan to re-architect their computing environment during the next two years are as follows:

Grouping	Percent	Total Responses
Groups 1 - 4	50	127
Groups 2 - 4	57	68
Group 3 and 4	62	39

- Percent of the Products Industry Group that plan to re-architect their computing environment during the next two years are as follows:

Grouping	Percent	Total Responses
Groups 1 - 4	50	70
Groups 2 - 4	65	40
Group 3 and 4	72	22

Views on Computing Environment Re-architecture (Next Two Years)

Table III-4

INDUSTRY PRACTICES	Number of Responses														
	Group - 1			Group - 2			Group - 3			Group - 4			Groups 1 - 4		
	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total
PRODUCTS	9	21	30	10	8	18	15	5	20	1	1	2	35	35	70
Business Services	- -	- -	- -	2	0	2	1	0	1	- -	- -	- -	3	0	3
Discrete Manufacturing	3	3	6	5	4	9	5	1	6	0	1	1	13	9	22
Process Manufacturing	4	5	9	1	1	2	6	3	9	- -	- -	- -	11	9	20
Retail Distribution	1	3	4	0	1	1	- -	- -	- -	- -	- -	- -	1	4	5
Transportation	0	1	1	- -	- -	- -	1	0	1	- -	- -	- -	1	1	2
Wholesale Distribution	1	9	10	2	2	4	2	1	3	1	0	1	6	12	18
FINANCIAL SERVICES	3	1	4	2	1	3	0	1	1	1	1	2	6	4	10
Banking/Finance	1	0	1	1	1	2	- -	- -	- -	1	0	1	3	1	4
Insurance	2	1	3	1	0	1	0	1	1	0	1	1	3	3	6
TELECOM	- -	- -	- -	- -	- -	- -	1	1	2	- -	- -	- -	1	1	2
GOVERNMENT	5	9	14	1	3	4	1	5	6	- -	- -	- -	7	17	24
Federal Government	1	3	4	0	2	2	- -	- -	- -	- -	- -	- -			
State/Local Government	3	4	7	0	1	1	0	1	1	- -	- -	- -	3	6	9
Education	1	2	3	1	0	1	1	4	5	- -	- -	- -			
HEALTHCARE	6	1	7	- -	- -	- -	1	1	2	- -	- -	- -	7	2	9
UTILITIES	1	2	3	2	1	3	3	0	3	- -	- -	- -	6	3	9
MISCELLANEOUS	0	1	1	0	1	1	1	0	1	- -	- -	- -	1	2	3
TOTAL INDUSTRY	24	35	59	15	14	29	22	13	35	2	2	4	63	64	127

Computing Environment Observations

- Organizations are unsure exactly what role the remnant Hosts (legacy systems) will play in the computing environment after migration from a hierarchical network to a distributed dominated network; however the following categories reflect distinct approaches from Group 3 and 4 organizations that are planning to migrate over the next two years:
  - Unknown
  - Will be integrated into a larger system as a server
  - Will run in parallel with the distributed network
  - Completely replaced by distributed dominated computing environment
- Responses indicate that the migration process is expected to take up to five years

Computing Environment Observations

- Major impediments pertaining to the computing environment re-architecture for Group 3 and 4 organizations include:
  - Under-staffed
  - Security Issues
  - Under-estimated funding
  - End-user Training/Retraining
  - Lack of software applications
  - Hardware connectivity problems
  - Lack of in-house skill-sets (technology expertise)

IN-HOUSE RECEPTIVENESS TO OUTSIDE SERVICES

Outside Services Opportunity Observations

- Percent of organizations that have, or will, utilize an outside service firm to assist with overall company business re-engineering activities are follows:

Grouping	Percent	Total Responses
Groups 1 - 4	41	134
Groups 2 - 4	46	72
Group 3 and 4	35	40

- Percent of the Products Industry Group that have, or will, utilize an outside service firm to assist with overall company business re-engineering activities are as follows:

Grouping	Percent	Total Responses
Groups 1 - 4	34	73
Groups 2 - 4	51	41
Group 3 and 4	34	22

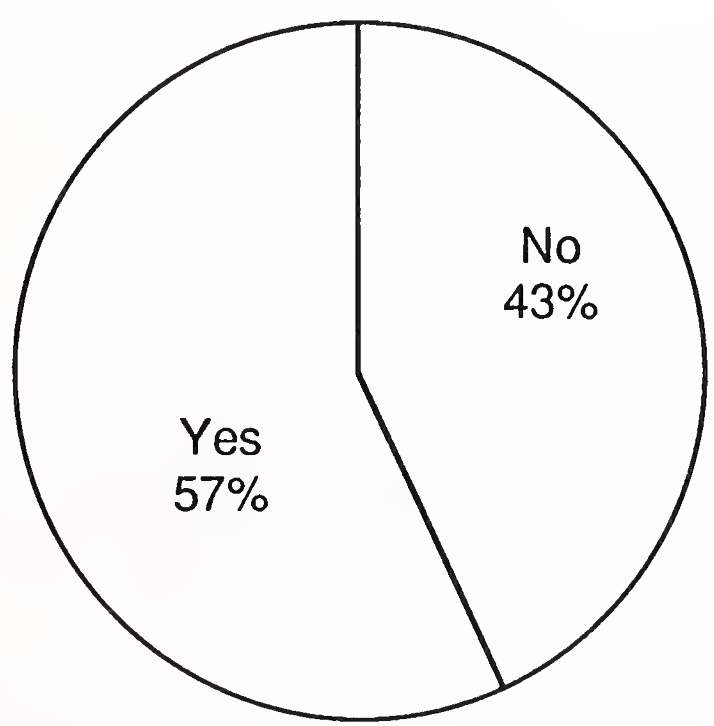
Views on Use of Outside Consulting Firms

Table III-5

INDUSTRY PRACTICES	Group - 1			Group - 2			Group - 3			Group - 4			Groups 1 - 4		
	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total	Yes	No	Total
PRODUCTS	6	26	32	14	5	19	6	14	20	1	1	2	27	46	73
Business Services	1	0	1	3	0	3	0	1	1	--	--	--	4	1	5
Discrete Manufacturing	1	6	7	6	3	9	3	3	6	0	1	1	10	13	23
Process Manufacturing	1	8	9	2	0	2	3	6	9	--	--	--	6	14	20
Retail Distribution	2	2	4	1	0	1	--	--	--	--	--	--	3	2	5
Transportation	0	1	1	--	--	--	0	1	1	--	--	--	0	2	2
Wholesale Distribution	1	9	10	2	2	4	0	3	3	1	0	1	4	14	18
FINANCIAL SERVICES	2	2	4	1	2	3	1	0	1	1	1	2	5	5	10
Banking/Finance	0	1	1	1	1	2	--	--	--	0	1	1	1	3	4
Insurance	2	1	3	0	1	1	1	0	1	1	0	1	4	2	6
TELECOM	--	--	--	--	--	--	1	2	3	--	--	--	1	2	3
GOVERNMENT	6	8	14	2	4	6	1	5	6	--	--	--	9	17	26
Federal Government	1	3	4	0	2	2	--	--	--	--	--	--			
State/Local Government	5	2	7	1	1	2	0	1	1	--	--	--	6	4	10
Education	0	3	3	1	1	2	1	4	5	--	--	--			
HEALTHCARE	6	1	7	--	--	--	1	1	2	--	--	--	7	2	9
UTILITIES	2	2	4	2	1	3	1	2	3	--	--	--	5	5	10
MISCELLANEOUS	0	1	1	0	1	1	1	0	1	--	--	--	1	2	3
TOTAL INDUSTRY	22	40	62	19	13	32	12	24	36	2	2	4	55	79	134

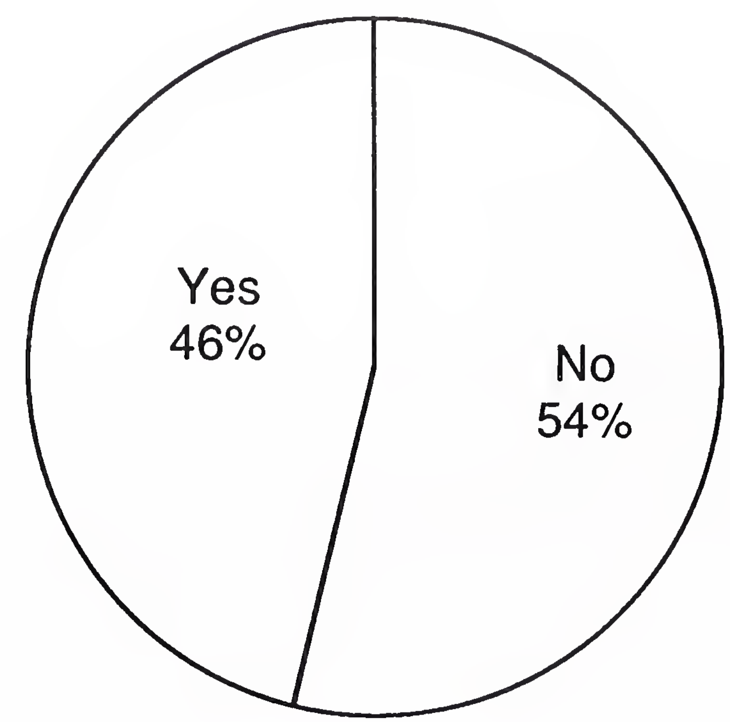
EXHIBIT III-2

Computing Environment Re-architecture: Corporate Two-Year Plans (Groups 2-4)



68 Responses

Use of Outside Consultant for Business Integration (Groups 2-4)



72 Responses

Response Matrix:
Use of Outside Services/
Plans To Re-architect Computing Environment

Table III-6

INDUSTRY	Group 1 - 4					Group 2 - 4				
PRACTICE	N/N	Y/Y	N/Y	Y/N	Total	N/N	Y/Y	N/Y	Y/N	Total
Products	28	19	17	7	71	9	16	11	5	41
Financial Services	3	4	1	1	9	2	2	0	1	5
Telecom	1	0	1	0	2	1	0	1	0	2
Government	15	4	2	2	23	8	1	1	0	10
Healthcare	0	5	2	2	9	0	0	1	1	2
Utilities	2	3	3	1	9	1	2	3	0	6
Misc. Industry	2	1	0	0	3	1	1	0	0	2
Total Industry	51	36	26	13	126	22	22	17	7	68

EXHIBIT III-3

Outside Services Opportunity Path (Sample: Group 2-4)

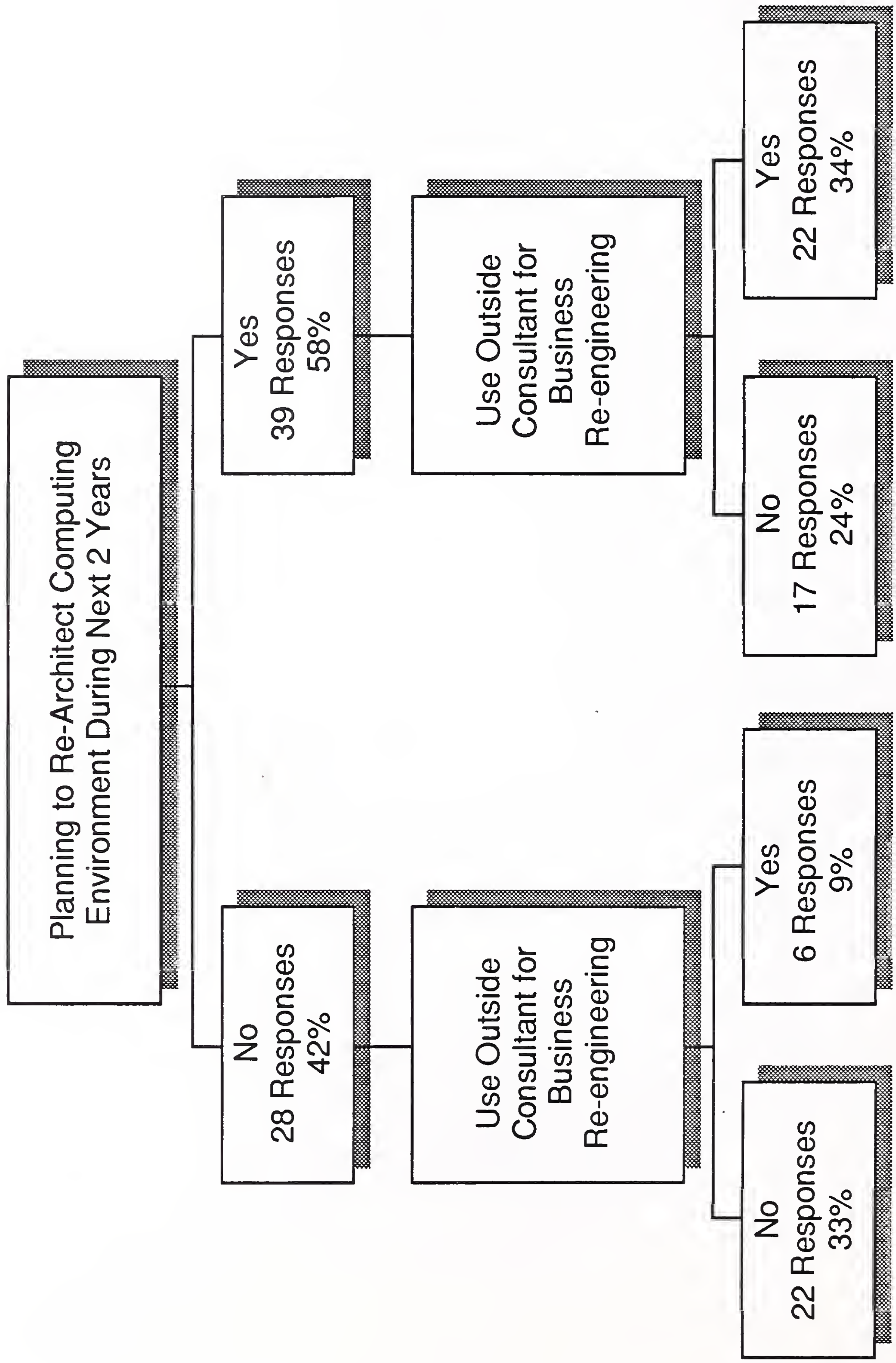
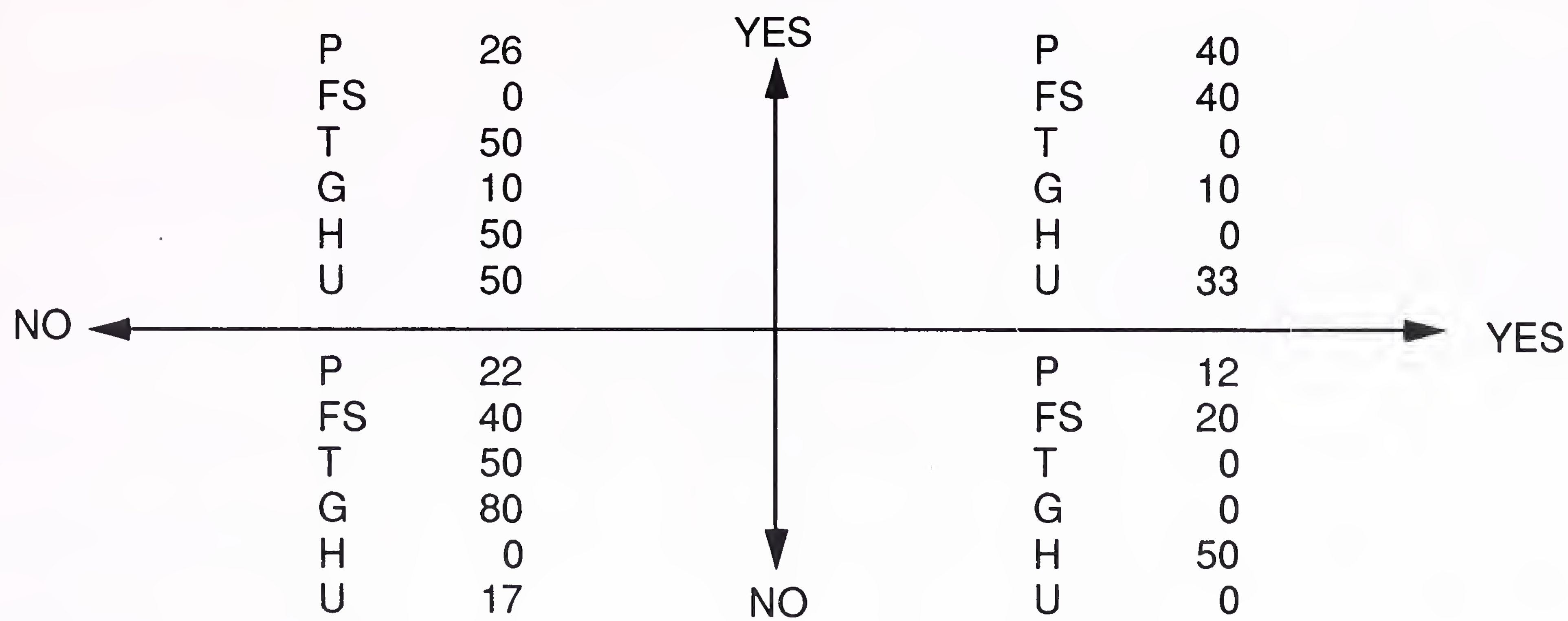


EXHIBIT III-4

Outside Services Opportunity Grid
(Sample: Group 2-4)

(PERCENT)



Use Outside Consultant / Re-Architect Plans	Products (P)	Financial Services (FS)	Telecom (T)	Government (G)	Health Care (H)	Utilities (U)
N/N	9	2	1	8	0	1
Y/Y	16	2	0	1	0	2
N/Y	11	0	1	1	1	3
Y/N	5	0	0	0	1	0
Total Responses	41	5	2	10	2	6

Responses Indicating Requirements Plans: (Next Three Years)

Table III-7

Company Requirement	Group 1 - 4								Group 2 - 4							
	Requirement Plans				Use Outside Firm				Requirement Plans				Use Outside Firm			
	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	81	46	3	130	28	39	14	81	49	18	2	69	16	26	7	49
Developing New Applications	94	32	3	129	34	47	13	94	54	12	2	68	19	25	10	54
Re-engineering Existing Applications	87	36	2	125	28	46	13	87	52	13	2	67	18	26	8	52
Integrating Existing Applications	93	34	1	128	33	44	16	93	54	13	1	68	20	24	10	54
Integrating or Upgrading Networks	99	25	2	126	32	53	14	99	55	10	2	67	20	29	6	55
Re-engineering Business Processes	81	45	2	128	22	39	20	81	51	14	2	67	12	27	12	51
Migrating to New Database Environments	76	46	4	126	26	33	17	76	50	15	3	68	14	25	11	50
Downsizing of Existing Applications	65	61	3	129	17	32	16	65	41	23	3	67	9	20	12	41

Yes=Y; No=N; Don't Know=DK; Total=T

EXHIBIT III-5

Company Requirement Plans
(Group 1-4)

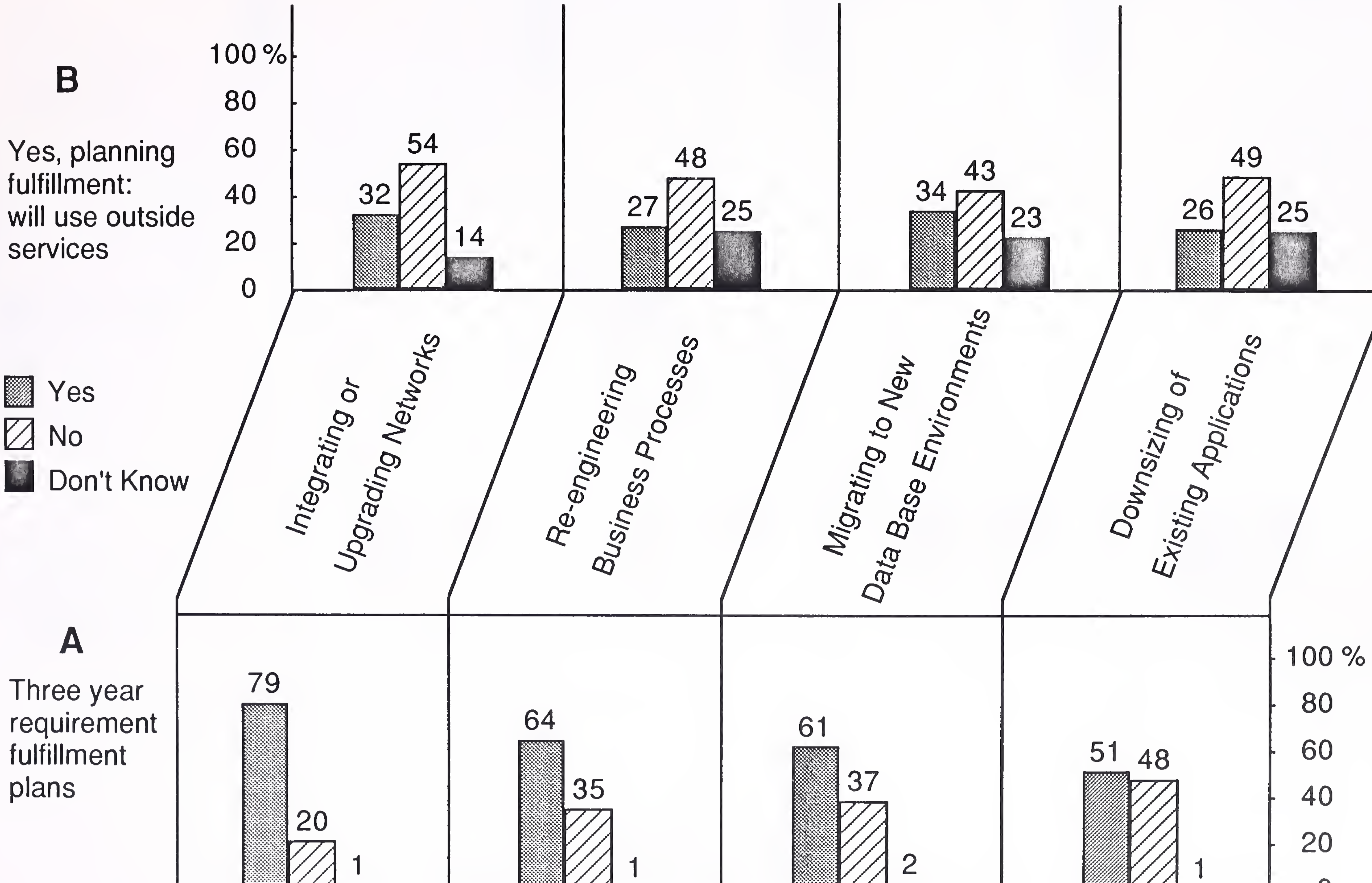
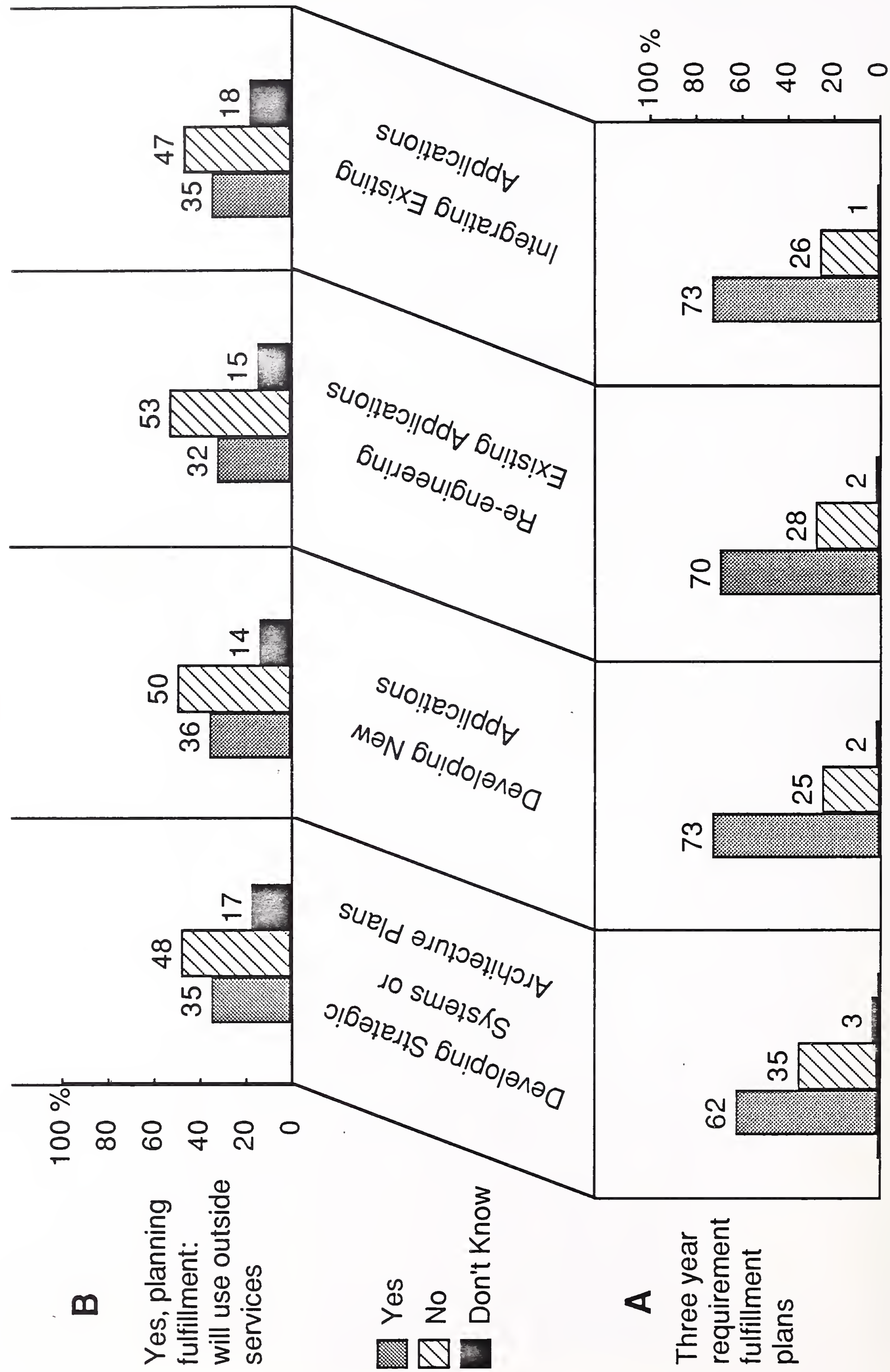


EXHIBIT III-6

Company Requirement Plans (Group 1-4)



ZAN

EXHIBIT III-7

Company Requirement Plans (Group 2-4)

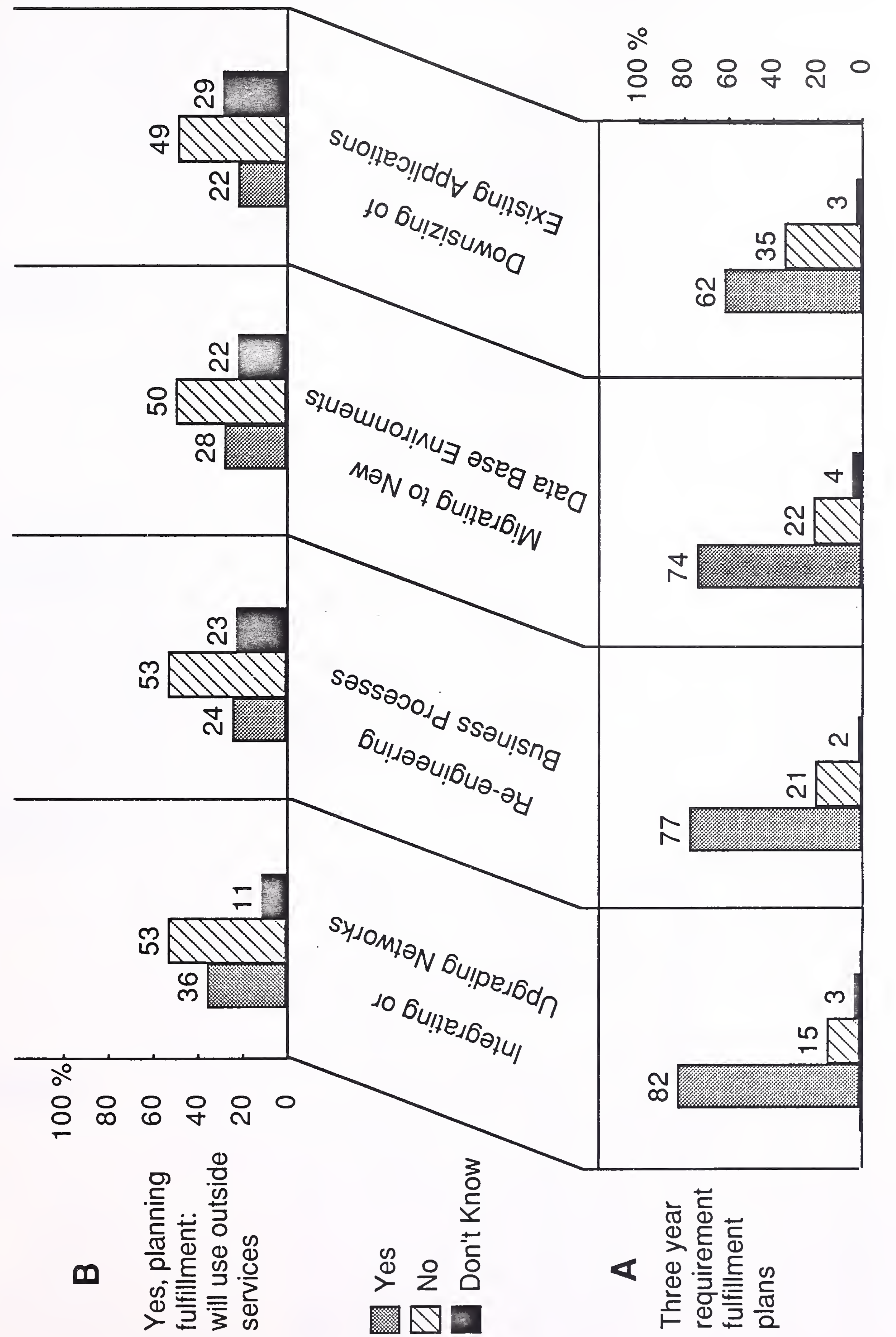


EXHIBIT III-8

Company Requirement Plans (Group 2-4)

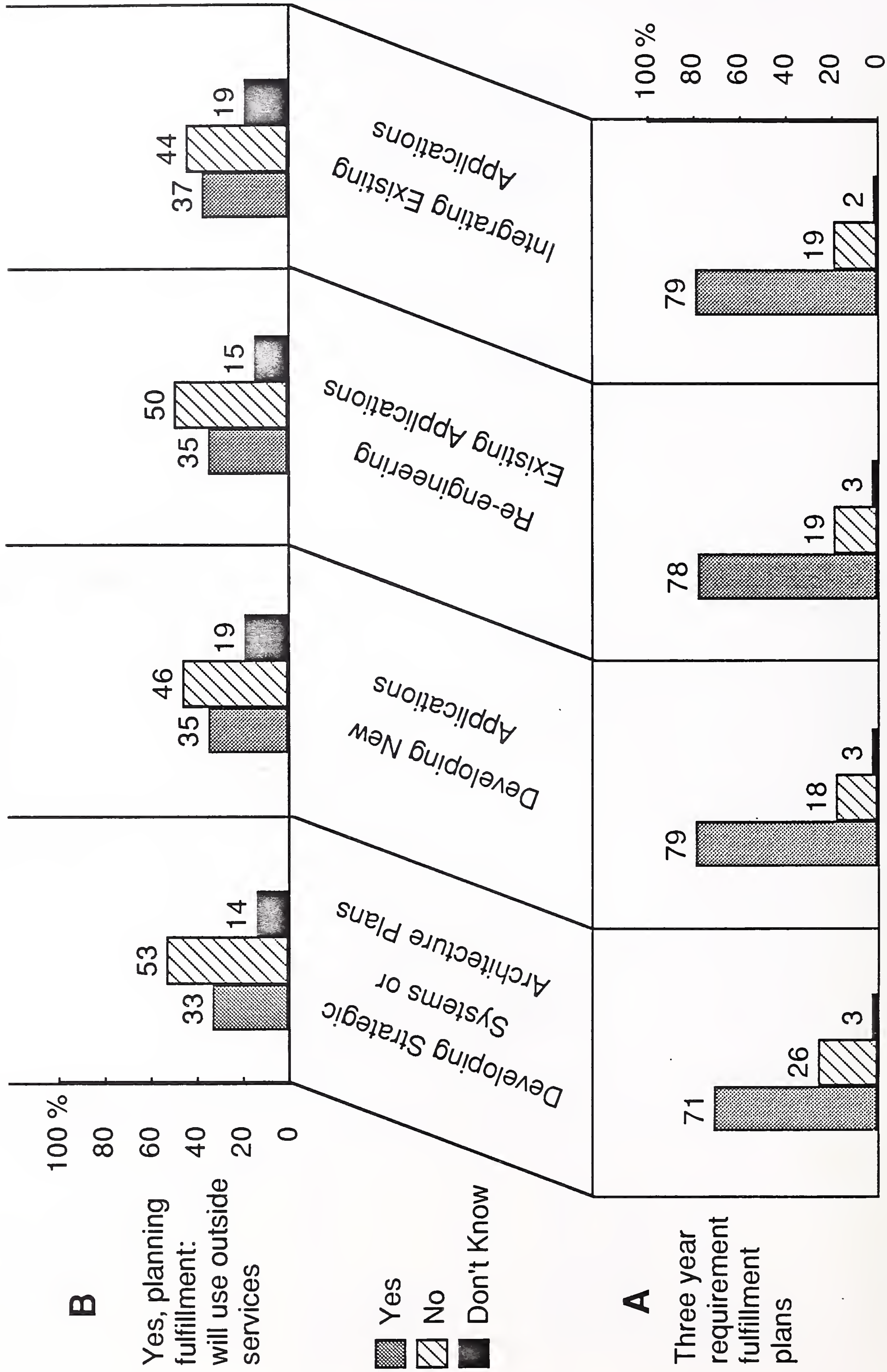
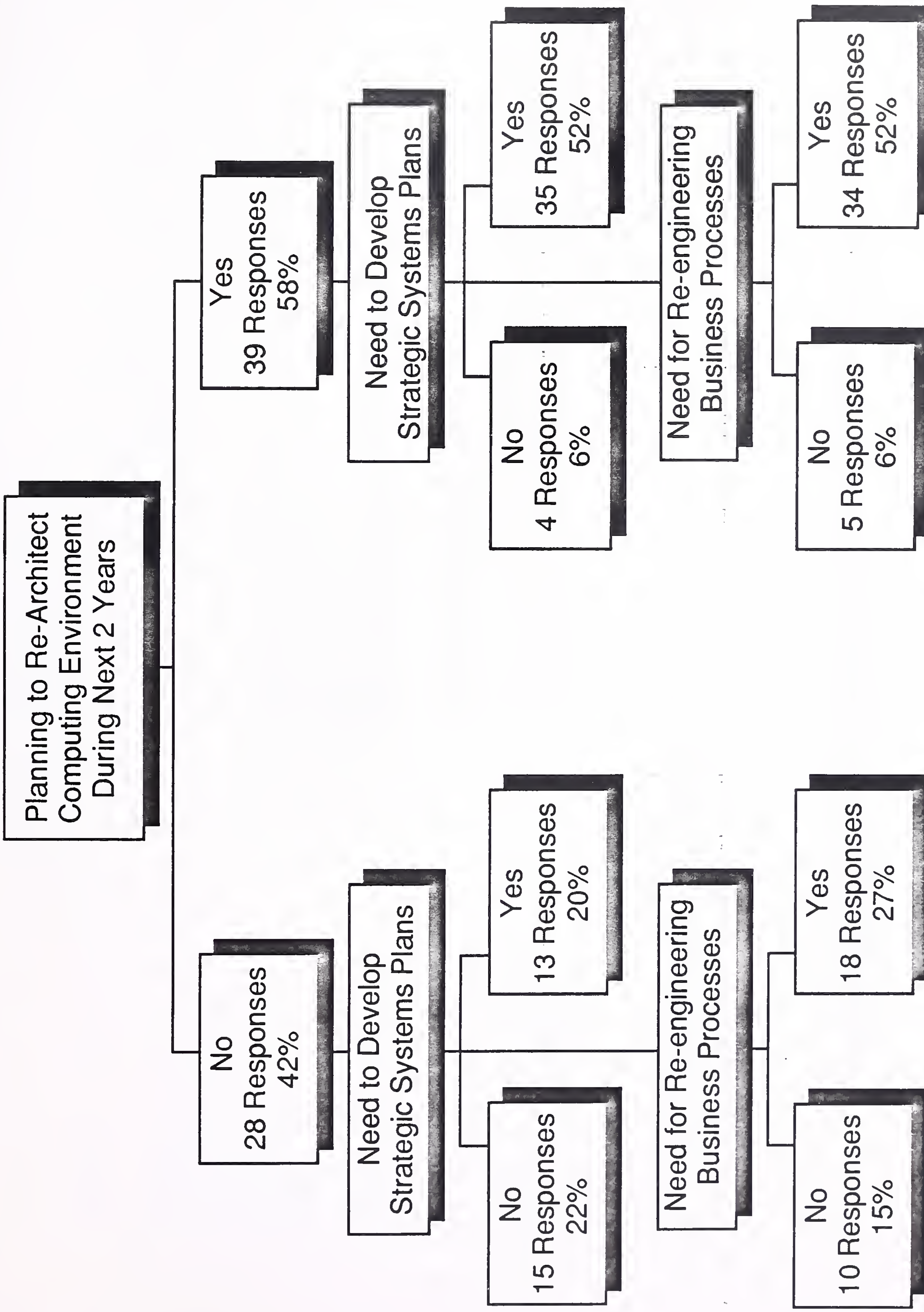


EXHIBIT III-9

Services Requirement Path
(Sample: Group 2-4)



Outside Services Opportunity Observations

- Organizations within Groups 2 - 4 rank the following skill-sets as important influential factors when selecting an outside service firm:

Rank	Expertise
1	Client/server Expertise
5	Business process design/re-design expertise
8	Organization change expertise

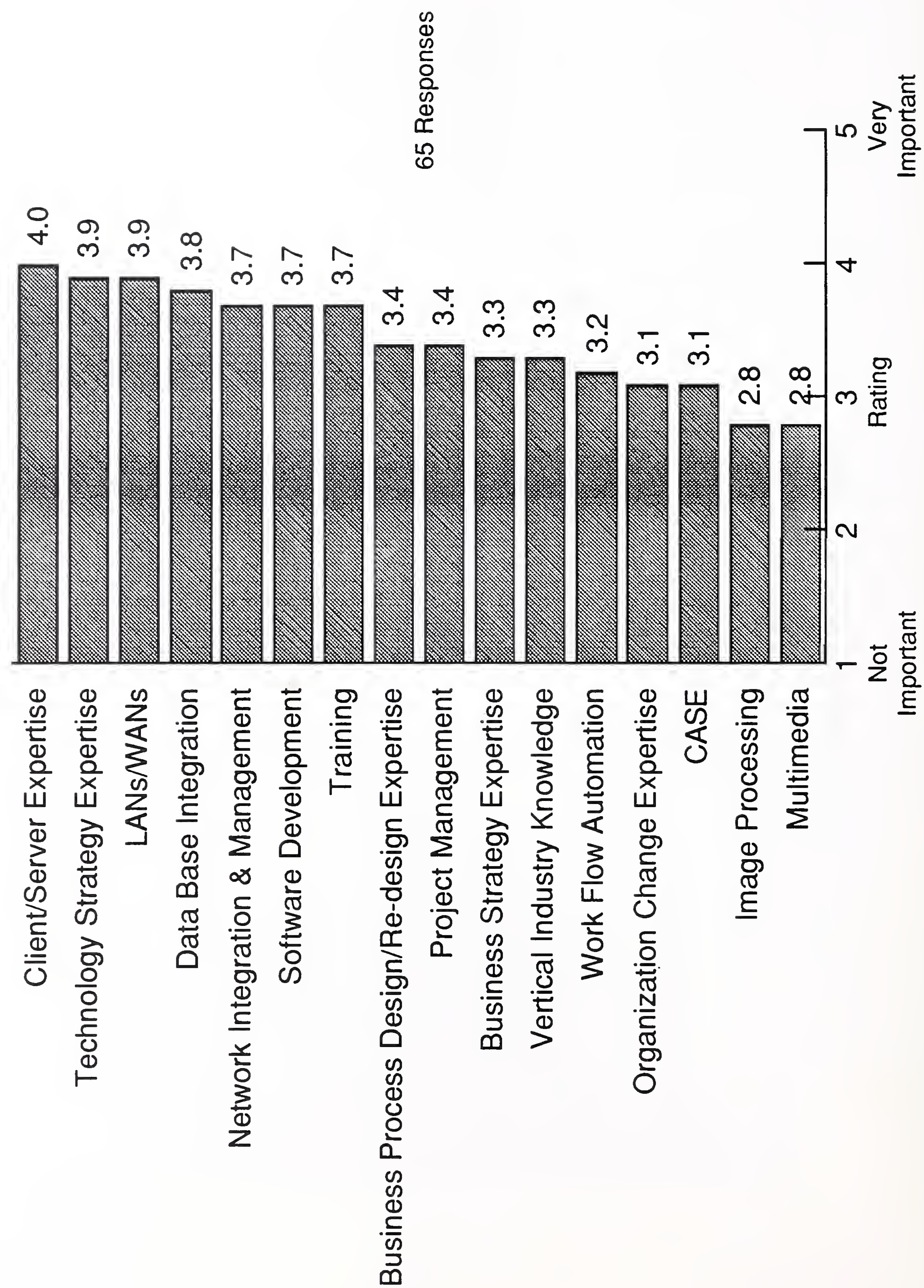
Average Skill-Set Rating
(1=Low - 5=High)

Table III-8

Skill-Set	Groups 1 - 4 Rate	Groups 1 - 4 Resp.	Group1 Rate	Group1 Resp.	Group 2 Rate	Group 2 Resp.	Group 3 Rate	Group 3 Resp.	Group 4 Rate	Group 4 Resp.
Technology Strategy Expertise	3.8	130	3.7	62	3.7	30	4.0	34	4.0	4
Software Development	3.7	129	3.6	61	3.6	30	3.6	34	4.5	4
Training	3.7	131	3.8	62	3.6	30	3.8	35	2.6	4
Client/Server	3.7	128	3.3	61	3.8	29	4.2	34	3.8	4
LANs/WANs	3.7	127	3.5	61	3.8	29	4.1	33	3.3	4
Network Integration/Mgt.	3.6	127	3.5	61	3.7	30	3.9	32	3.0	4
Data Base Integration	3.6	127	3.5	61	3.7	29	3.9	33	3.0	4
Project Management	3.5	127	3.5	61	3.4	29	3.4	33	3.8	4
Business Process Design/Re-design	3.4	127	3.4	61	3.4	28	3.4	34	3.5	4
Business Strategy Expertise	3.3	129	3.2	62	3.2	29	3.4	34	3.0	4
Vertical Industry Knowledge	3.2	128	3.1	61	3.3	29	3.2	34	3.0	4
Workflow Automation	3.2	128	3.3	61	3.0	29	3.4	34	3.0	4
Organizational Change	3.0	127	2.8	61	2.9	29	3.4	33	2.6	4
CASE	3.0	124	2.9	59	2.8	29	3.3	33	2.7	3
Image Processing	2.9	126	3.0	60	2.5	29	3.0	33	3.3	4
Multimedia	2.8	127	2.7	61	2.6	28	3.0	34	2.8	4

EXHIBIT III-10

Outside Service Firm Selection Criteria (Group 2-4)



IN-HOUSE BUDGET PLANS

Budget Observations

- 28 percent of the Group 2 - 4 organizations felt that their business integration budget will increase

- IS budgets for Group -4 organizations are as follows:

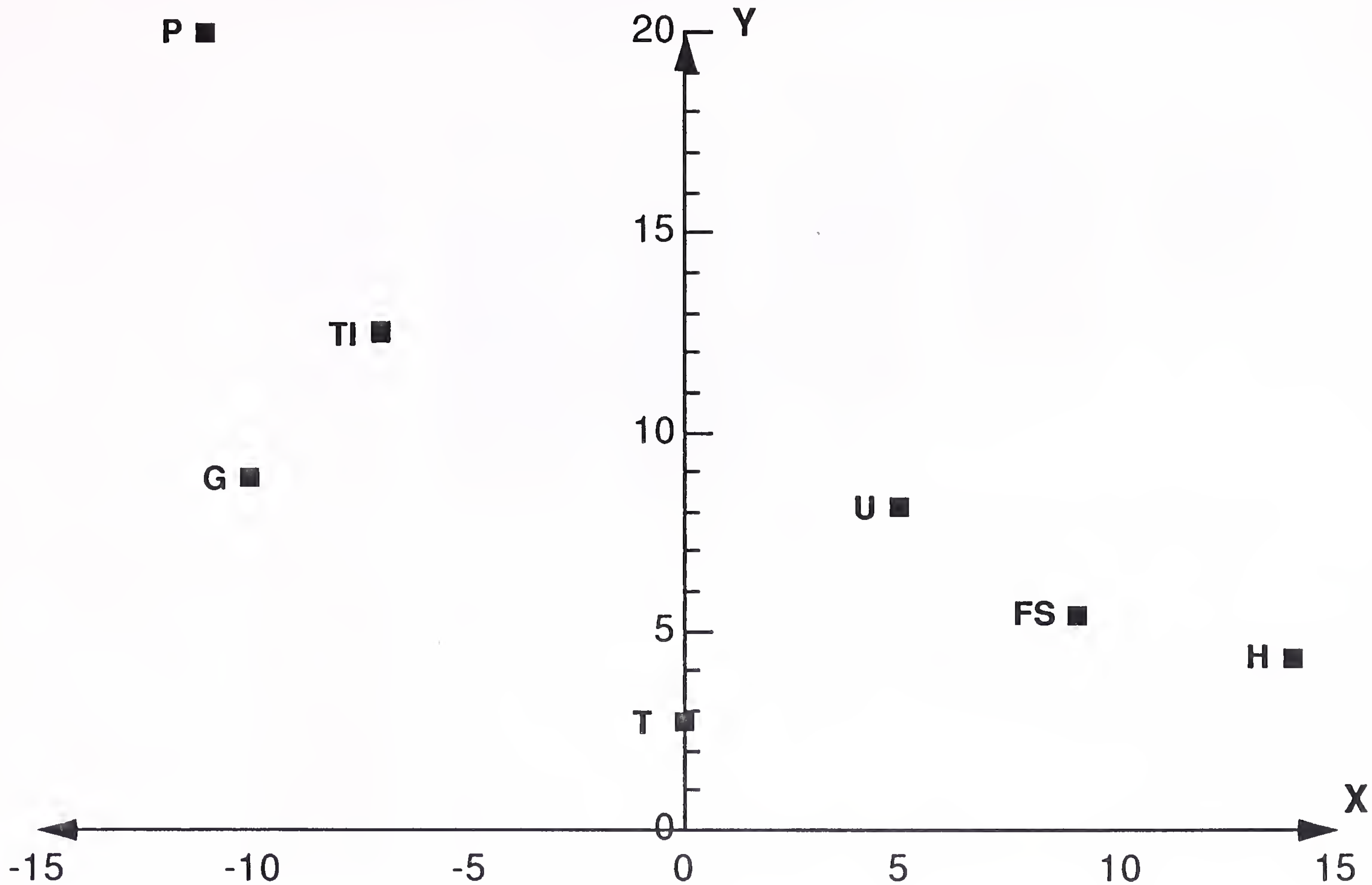
Industry	IS Budget (Millions $)	Entire IS Budget?	% Used for Outside Services in 1993
Wholesale	50	Yes	15.0
Banking/Finance	750	No	2.0
Insurance	20	Yes	2.4

- The average IS budget for Group - 3 organizations amounted to $20 million (26 responses)

- The average IS budget for Group - 2 organizations amounted to $11million (26 responses)

EXHIBIT III-11

Average 1993 IS Budgets and Growth Rate by Industry (Group 1-4)



X = 1993-1994 Growth Rate

Y = Average 1993 Budget ($ Millions)

INDUSTRY:

Products	= P	Financial Services	= FS
Telecom	= T	Gov't	= G
Health Care	= H	Utilities	= U
Total Industry	= TI		

EXHIBIT III-12

Average 1994 IS Budget by Industry (Group 1-4)

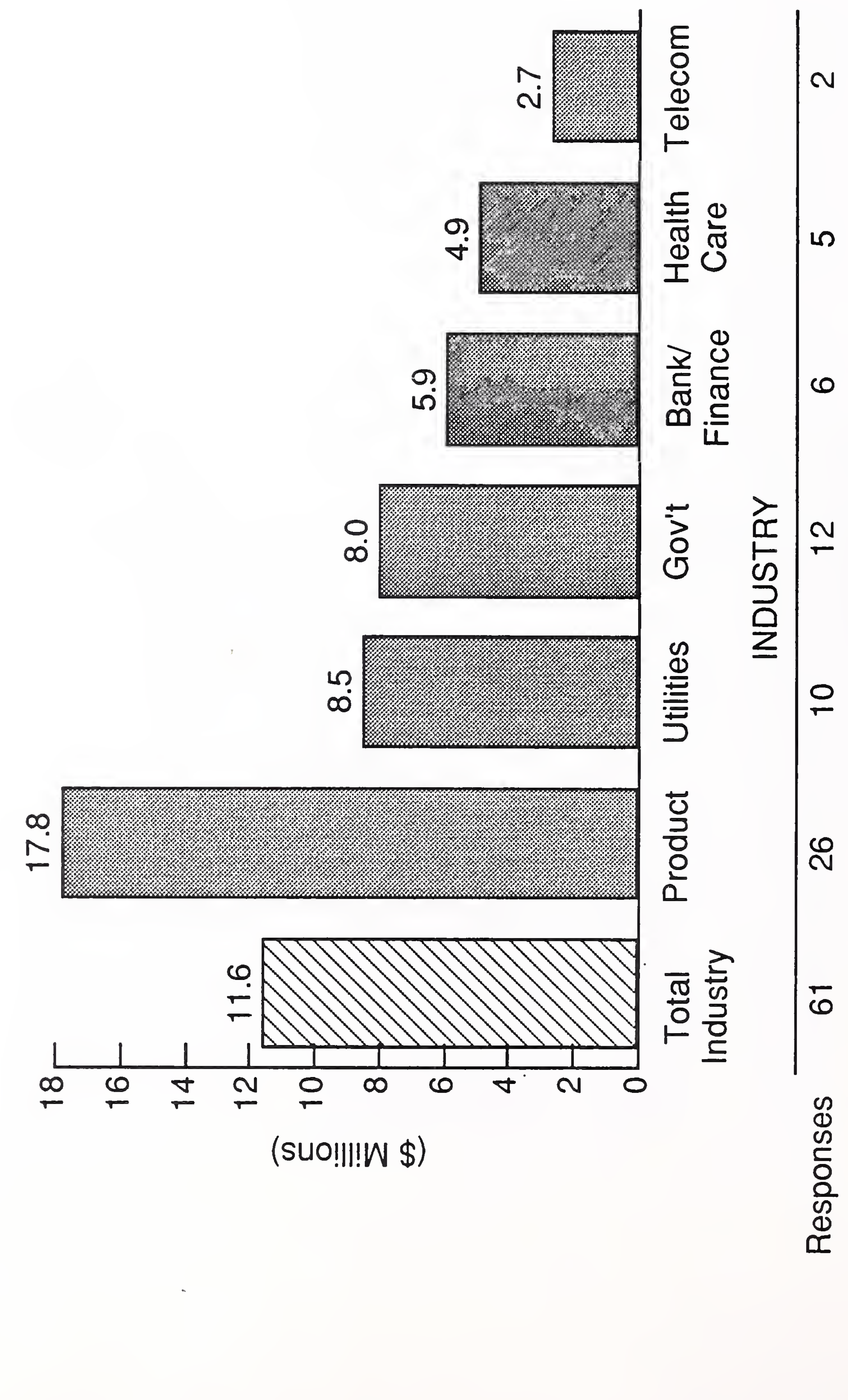
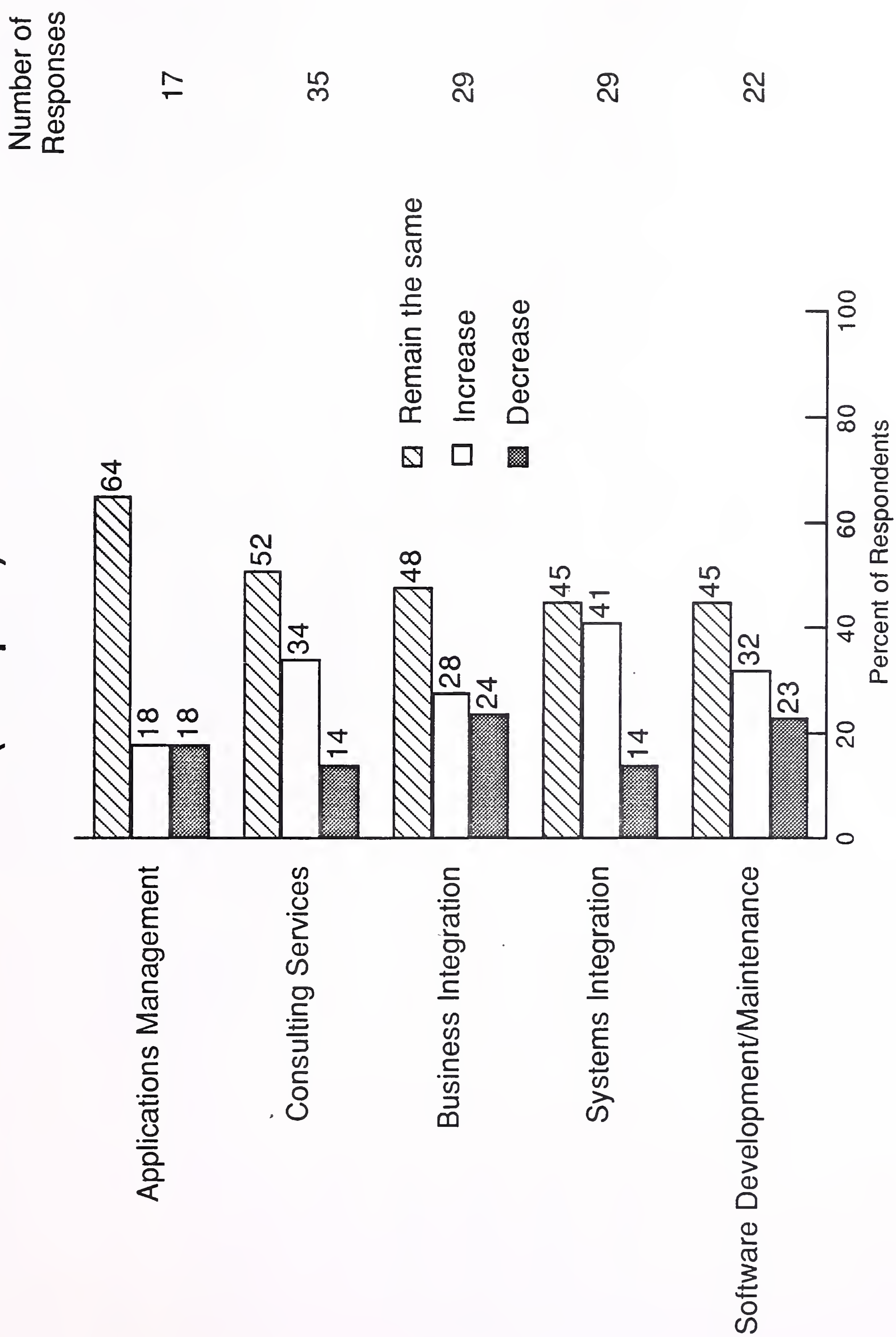


EXHIBIT III-13

IS Budget Expectations Over the Next 3 Years (Group 2-4)



COMPETITIVE DATA

Outside Service Firm Usage

Table III-9

Metropolitan Area	Group	Industry	Business Integration	Systems Integration	Consulting Services	Software Dev.	Application Mgt.
Phoenix, AZ	2	Discrete Mfg.	None	Novell	Novell	Apple Novell	Novell
Phoenix, AZ	3	Utilities	IBM	**Andersen**	**Andersen**	None	None
Phoenix, AZ	1	Utilities	None	None	C & L	None	None
Los Angeles, CA	3	Discrete Mfg.	None	None	None	D & T	**Andersen**
Los Angeles, CA	2	Banking	**Andersen**	**Andersen**	**Andersen**	None	None
Los Angeles, CA	1	Wholesale	None	IBM	None	None	None
Los Angeles, CA	2	Wholesale	**Andersen**	None	None	None	None
Los Angeles, CA	1	Process Mfg.	KPMG	KPMG	KPMG	KPMG	KPMG
Los Angeles	2	State/Local Gov't	**Andersen** DMR IBM	IBM	**Andersen** DMR Price Waterhouse	Small Shops	None

Outside Service Firm Usage

Table III-9 (Cont.)

Metropolitan Area	Group	Industry	Business Integration	Systems Integration	Consulting Services	Software Dev.	Application Mgt.
Los Angeles	3	Misc.	DEC	DEC	DEC	Apple DEC	DEC
Los Angeles, CA	2	Discrete Mfg.	CSC McKinsey	None	McKinsey	None	CSC
Los Angeles, CA	3	Discrete Mfg.	**Andersen**	CSC	Many	None	None
San Francisco, CA	2	Discrete Mfg.	None	IBM	None	None	None
San Francisco, CA	3	Discrete Mfg.	None	None	DEC IBM	None	None
San Francisco, CA	2	Discrete Mfg.	Hughes LAN	None	HP	None	None
San Francisco, CA	1	Discrete Mfg.	EDS	EDS	EDS	EDS	EDS

Outside Service Firm Usage

Table III-9 (Cont.)

Metropolitan Area	Group	Industry	Business Integration	Systems Integration	Consulting Services	Software Dev.	Application Mgt.
San Francisco, CA	2	Banking	DEC	IBM	IBM	None	None
San Francisco, CA	3	Process Mfg.	None	None	EDS	Differs by application	None
San Francisco, CA	3	Process Mfg.	EDS	EDS	EDS	EDS	EDS
San Francisco	3	Healthcare	DEC	DEC	Really, Inc.	None	None
San Francisco, CA	2	Business Services	None	None	**Andersen**	None	None
San Francisco, CA	1	Business Services	None	None	**Andersen**	None	None
San Francisco, CA	1	Healthcare	DEC	DEC	First Con. Grp	None	None

Outside Service Firm Usage

Table III-9 (Cont.)

Metropolitan Area	Group	Industry	Business Integration	Systems Integration	Consulting Services	Software Dev.	Application Mgt.
Denver, CO	3	Process Mfg.	Big 6	Big 6	Big 6	Big 6	
Boise, ID	2	State/Local Gov't	None	None	Prodata	None	None
Boise, ID	1	State/Local Gov't	None	None	Prodata	Prodata	None
Helena, MO	1	State/Local Gov't	None	None	Wang	None	None
Helena, MO	1	Insurance	IBM	IBM	IBM	IBM	IBM
Las Vegas	1	Healthcare	**Andersen**	None	**Andersen**	None	None
Las Vegas NV	1	Wholesale	IBM	IBM	IBM	IBM	IBM
Portland, OR	2	Wholesale	D & T	D & T	D & T	None	None
Salt Lake City, UT	1	Discrete Mfg.	None	IBM	None	None	None
Salt Lake City, UT	1	Healthcare	None	DEC	DEC	None	None
Seattle	1	State/Local Gov't	DEC Ingres	DEC Ingres	RFP's	RFP's	None

Outside Service Firm Usage

Table III-9 (Cont.)

Metropolitan Area	Group	Industry	Business Integration	Systems Integration	Consulting Services	Software Dev.	Application Mgt.
Seattle, WA	1	Healthcare	First Con. Grp	First Con. Grp	First Con. Grp	None	
Seattle, WA	3	Process Mfg.	Ernst & Young	None	None	RFP	
Seattle, WA	1	Trans.	None	None	DEC	None	
Seattle, WA	3	Banking	None	None	**Andersen** EDS IBM	None	None
Seattle, WA	1	Insurance	CAP Gemini IBM	CAP Gemini IBM	IBM	None	None
Cheyenne, WY	1	State/Local Gov't	None	Big 6	Big 6	Big 6	None

IS Manager's Perceptions:
Service Firm's Strengths/Weaknesses

Table III-10

Company	Resp.	Strengths	Freq.	Weakness	Freq.
Andersen	31	Current Knowledge Base	12	Cost	7
		Talented People	6	Flexibility	4
		Strong Project Management	1	None	3
		Product Integration	1	Turnover	1
		Industry Expertise	1	Technology Expertise	1
		Customer Service	1	Unanswered	15
		Unanswered	9		
DEC	32	Tech./Hardware Expertise	14	Cost	6
		Flexibility	3	Customer Service	4
		Cost	2	Solutions not Open	2
		Reliability	2	Internal Problems	2
		Applications Expertise	2	Applications Knowledge	2
		Industry Expertise	1	None	2
		Responsiveness	1	Unanswered	14
		Unanswered	7		

IS Manager's Perceptions: Service Firm's Strengths/Weaknesses

Table III-10 (Cont.)

Company	Resp.	Strengths	Freq.	Weakness	Freq.
EDS	6	Experienced People	3	Cost	1
		Broad Expertise	1	Unanswered	5
		Unanswered	2		
IBM	49	Product/Tech. Knowledge	9	Cost	13
		General Knowledge	9	None	7
		Responsiveness/Local	7	Internal Problems	3
		Flexibility	6	Concerned w/IBM Solutions	2
		Reliability	5	Complicated Documentation	2
		Company Size	3	Follow-up	1
		Professionalism	2	Flexibility	1
		On-time Delivery	1	Personnel Turn-over	1
		Unanswered	7	Business Understanding	1
				Unanswered	18

IV

Market Size And Forecast

Organizational Size Segmentation: By Area

Table IV-1

		Number of Organizations			
Area	Industry	Group 1	Group 2	Group 3,4	Total
Arizona, Phoenix/Mesa	Banking	5	0	0	5
	Education	1	0	0	1
	Government - Federal	1	0	0	1
	Government - Local	4	0	0	4
	Government - State	9	0	0	9
	Insurance	1	0	0	1
	Medical	10	0	0	10
	Mfg. - Nondurable	4	1	0	5
	Mfg. - Durable	14	5	0	19
	Retail	1	0	0	1
	Services	1	0	0	1
	Transportation	3	0	0	3
	Utilities	3	0	0	3
	Wholesale	13	0	0	13
Total: Phoenix/Mesa		70	6	0	76
California, San Francisco	Banking	15	1	0	16
	Communications	1	0	0	1
	Education	1	0	0	1
	Government - Local	4	0	0	4
	Government - State	4	0	0	4
	Insurance	4	1	0	5
	Medical	11	0	1	12
	Mfg. - Durable	3	1	0	4
	Mfg. - Nondurable	10	1	0	11
	Mining	0	2	0	2
	Retail	1	1	0	2
	Services	4	0	0	4
	Transportation	2	0	1	3
	Utilities	1	0	1	2
	Wholesale	9	0	0	9
Total: San Francisco		70	7	3	80

Source: Computer Intelligence

Organizational Size Segmentation: By Area

Table IV-1 (Cont.)

Area	Industry	Number of Organizations Group 1	Group 2	Group 3,4	Total
California, Los Angeles/ Long Beach	Banking	15	4	0	19
	Communications	2	0	0	2
	Construction	1	0	0	1
	Education	6	1	0	7
	Government - Federal	4	1	1	6
	Government - Local	8	1	0	9
	Government - State	4	0	0	4
	Insurance	17	4	0	21
	Medical	41	0	0	41
	Mfg. - Durable	34	6	5	45
	Mfg. - Nondurable	42	6	4	52
	Mining	2	0	0	2
	Retail	8	1	0	9
	Services	19	1	0	20
	Transportation	6	0	0	6
	Utilities	1	2	0	3
	Wholesale	61	7	1	69
Total: L. A./ Long Beach		271	34	11	316
Colorado, Denver	Banking	8	0	0	8
	Education	2	0	0	2
	Government - Federal	1	0	0	1
	Government - Local	0	1	0	1
	Government - State	3	0	0	3
	Insurance	2	0	0	2
	Medical - Hospital	10	0	0	10
	Mfg. - Durable	6	2	0	8
	Mfg. - Nondurable	12	1	1	14
	Mining	1	0	0	1
	Services	2	0	0	2
	Transportation	3	0	0	3
	Wholesale	14	0	1	15
Total: Denver		64	4	2	70

Source: Computer Intelligence

Organizational Size Segmentation: By Area

Table V-1 (Cont.)

Area	Industry	Number of Organizations Group 1	Group 2	Group 3,4	Total
Idaho, Boise City	Government - State	2	0	0	2
	Medical - Hospital	2	0	0	2
	Mfg. - Durable	1	0	1	2
	Mfg. - Nondurable	1	0	0	1
	Retail	1	0	0	1
	Utilities	1	0	0	1
Total: Boise City		8	0	1	9
Montana, Helena	Financial	1	0	0	1
	Government	1	0	0	1
Total: Helena		2	0	0	2
Nevada, Las Vegas	Banking	1	0	0	1
	Education	1	0	0	1
	Government - Local	2	0	0	2
	Insurance	1	0	0	1
	Medical/Hospital	2	0	0	2
	Services	20	0	0	20
	Utilities	1	0	0	1
	Wholesale	1	0	0	1
Total: Las Vegas		29	0	0	29
New Mexico, Albuquerque	Banking	1	0	0	1
	Education	1	0	0	1
	Government - Federal	0	1	0	1
	Government - Local	1	0	0	1
	Insurance	1	1	0	2
	Medical/Hospital	4	0	0	4
	Mfg. - Durable	4	0	0	4
	Utilities	1	0	0	1
Total: Albuquerque		13	2	0	15

Source: Computer Intelligence

Organizational Size Segmentation: By Area

Table IV-1 (Cont.)

Area	Industry	Number of Organizations Group 1	Group 2	Group 3,4	Total
Oregon, Portland	Banking	3	1	0	4
	Communications	1	0	0	1
	Education	1	0	0	1
	Government - Federal	2	0	0	2
	Government - Local	1	0	0	1
	Insurance	2	0	0	2
	Medical	4	0	0	4
	Mfg. - Durable	9	1	0	10
	Mfg. - Nondurable	10	0	0	10
	Retail	3	0	0	3
	Services	1	0	0	1
	Transportation	1	0	0	1
	Utilities	1	0	0	1
	Wholesale	12	1	0	13
Total: Portland		51	3	0	54
Utah, Salt Lake City	Banking	2	0	0	2
	Communications	1	0	0	1
	Education	2	0	0	2
	Government - Federal	3	0	0	3
	Government - State	2	0	0	2
	Medical	5	0	0	5
	Mfg. - Durable	9	0	0	9
	Mfg. - Nondurable	11	0	0	11
	Mining	2	0	0	2
	Services	3	0	0	3
	Transportation	2	0	0	2
	Utilities	1	0	0	1
	Wholesale	7	1	0	8
Total: Salt Lake City		50	1	0	51

Source: Computer Intelligence

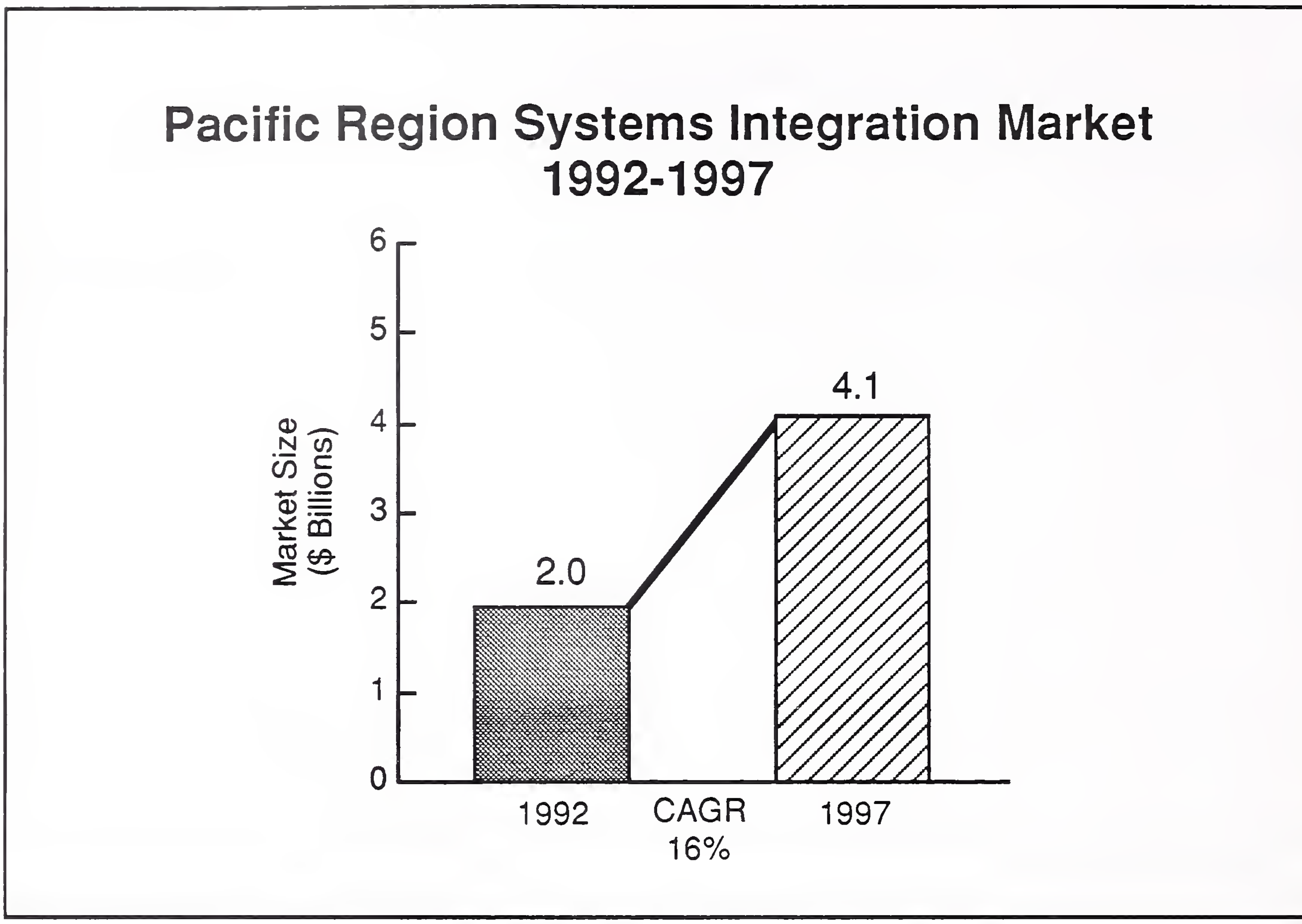
Organizational Size Segmentation: By Area

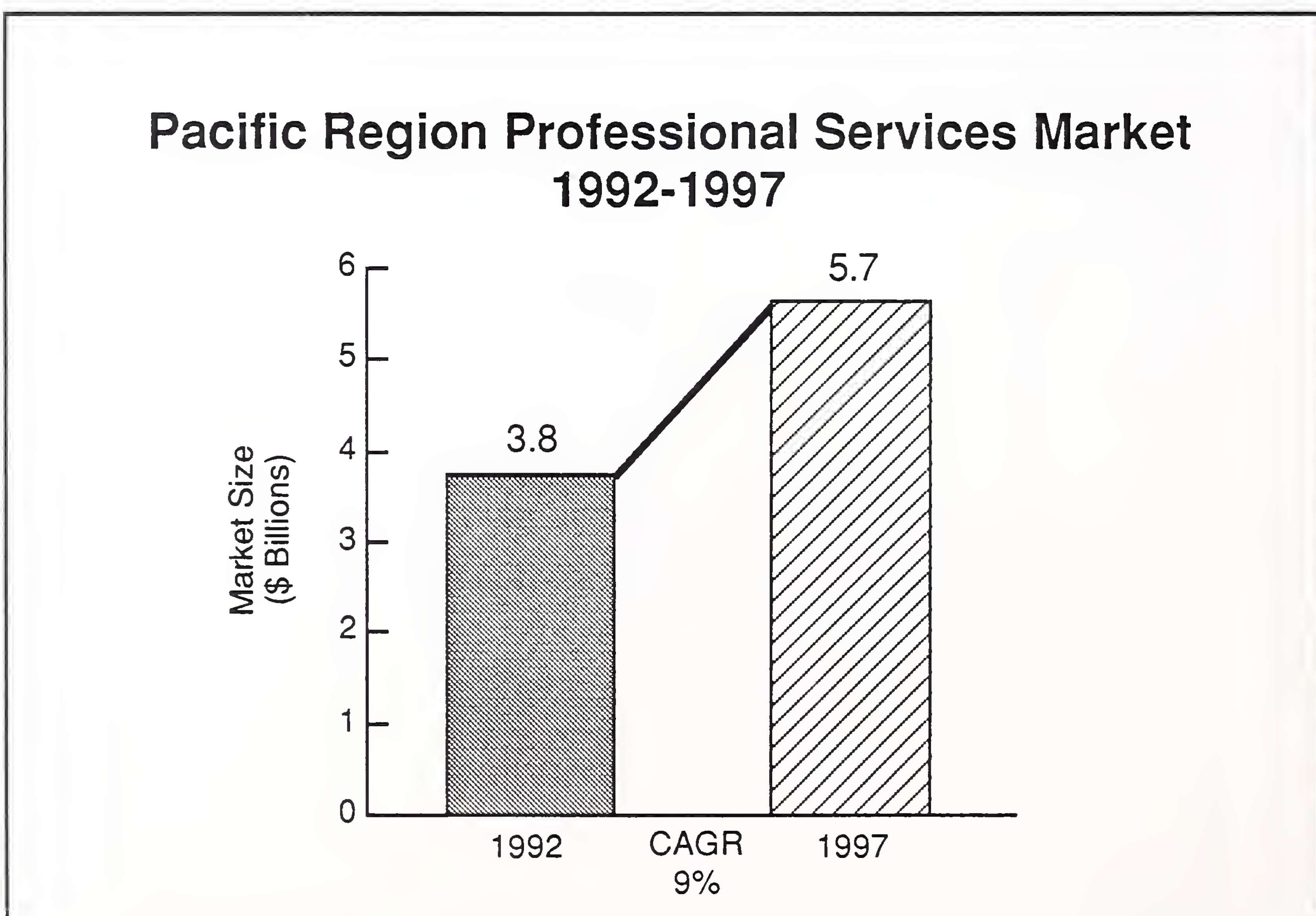
Table IV-1 (Cont.)

		Number of Organizations			
		Group	Group	Group	
Area	Industry	1	2	3,4	Total
Washington, Seattle/ Everett	Banking	1	0	0	1
	Communications	2	0	0	2
	Education	1	0	0	1
	Government - Local	1	0	0	1
	Government - State	2	0	0	2
	Insurance	13	2	0	15
	Medical	9	0	0	9
	Mfg. - Durable	13	0	2	15
	Mfg. - Nondurable	6	1	0	7
	Retail	1	0	0	1
	Services	6	0	1	7
	Transportation	2	0	0	2
	Utilities	3	1	0	4
	Wholesale	8	1	0	9
Total: Seattle/Everett		68	5	3	76
Wyoming, Cheyenne	Government - Federal	1	0	0	1
	Government - State	1	0	0	1
	Mfg - Nondurable	1	0	0	1
Total: Cheyenne		3	0	0	3

Source: Computer Intelligence

EXHIBIT IV-1


Pacific Region Systems Integration Market
1992-1997
Market Size
($ Billions)
6
5
4
3
2
1
0
2.0
4.1
1992
CAGR
16%
1997


Pacific Region Professional Services Market
1992-1997
Market Size
($ Billions)
6
5
4
3
2
1
0
3.8
5.7
1992
CAGR
9%
1997

Market Forecast Observations

- By 1997 the Systems Integration market will grow to $4.1 billion, a CAGR of 16 percent
- Expected 1992 - 1997 CAGR for the Industry Practices are as follows:

Industry Group	CAGR (%)
Products	21
Financial Services	20
Telecom	21
Government	14
Healthcare	11
Utilities	10

Market Forecast Observations

- By 1997 the Profession Services market will grow to $5.7 billion, a CAGR of 9 percent
- Expected 1992 - 1997 CAGR for the Industry Practices is as follows:

Industry Group	CAGR (%)
Telecom	15
Utilities	14
Government	9
Healthcare	9
Financial Services	8
Products	8

EXHIBIT IV-2

Pacific Region SI Industry Forecast, 1992-1997

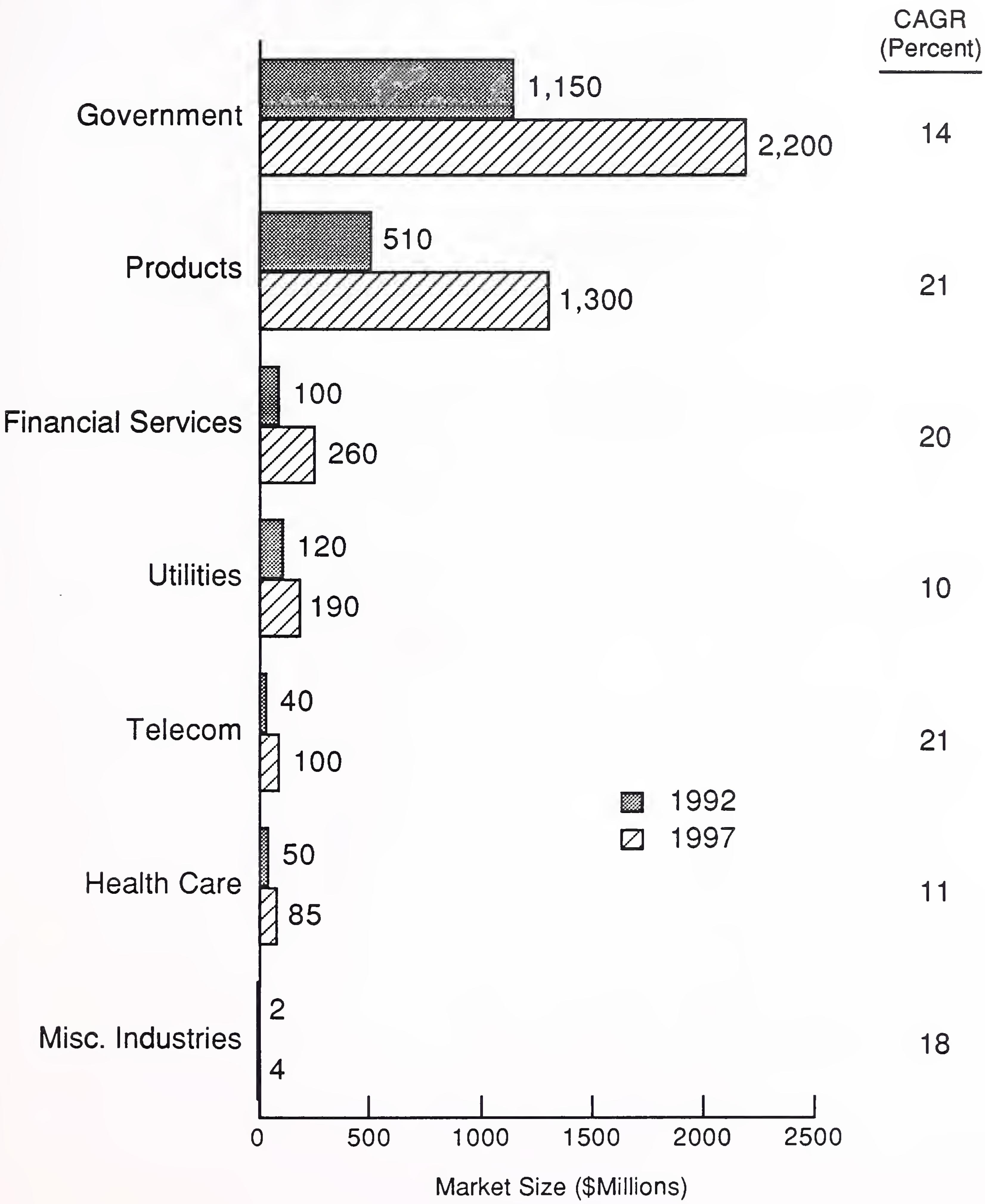
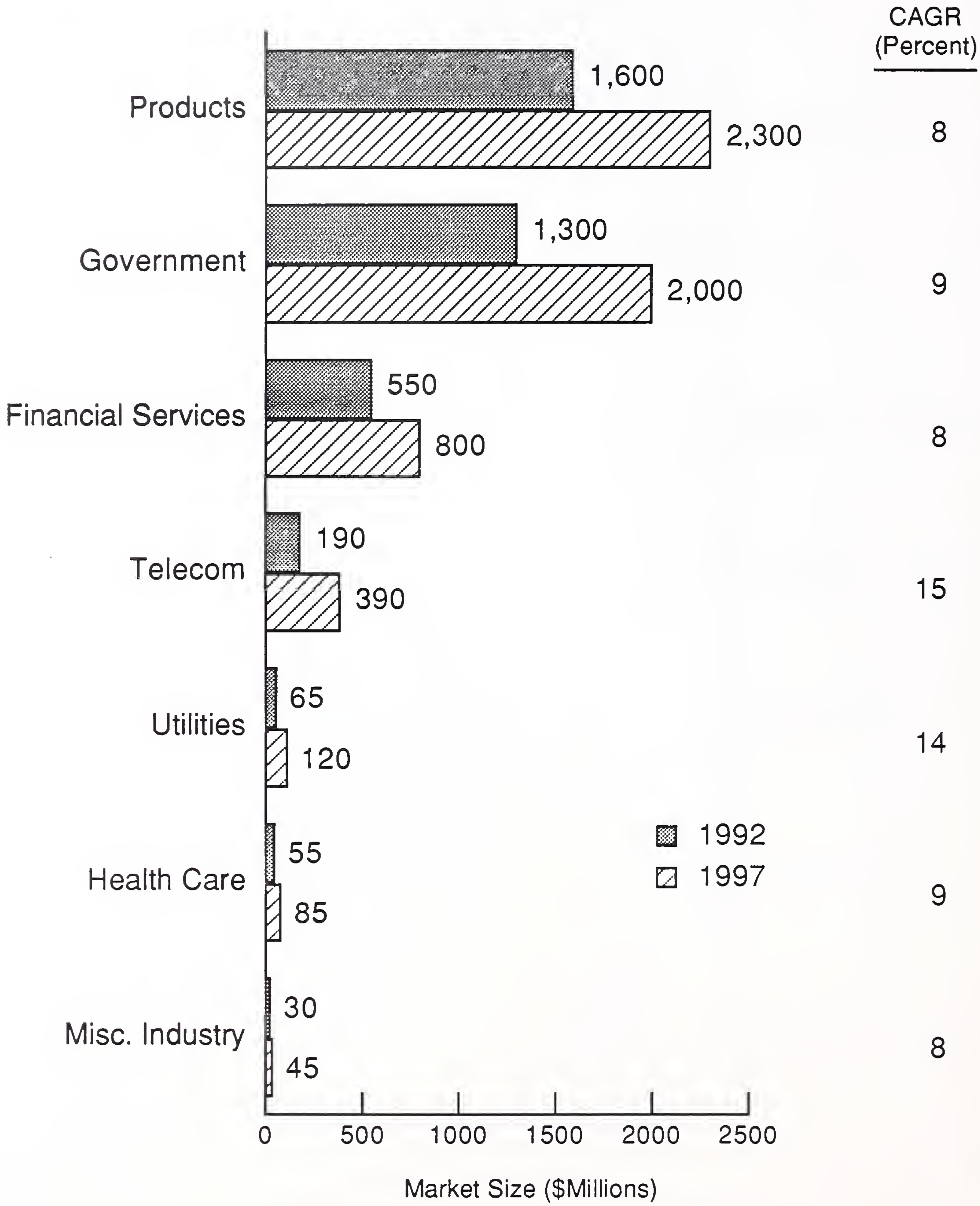


EXHIBIT IV-3

Pacific Region Professional Services Industry Forecast, 1992-1997

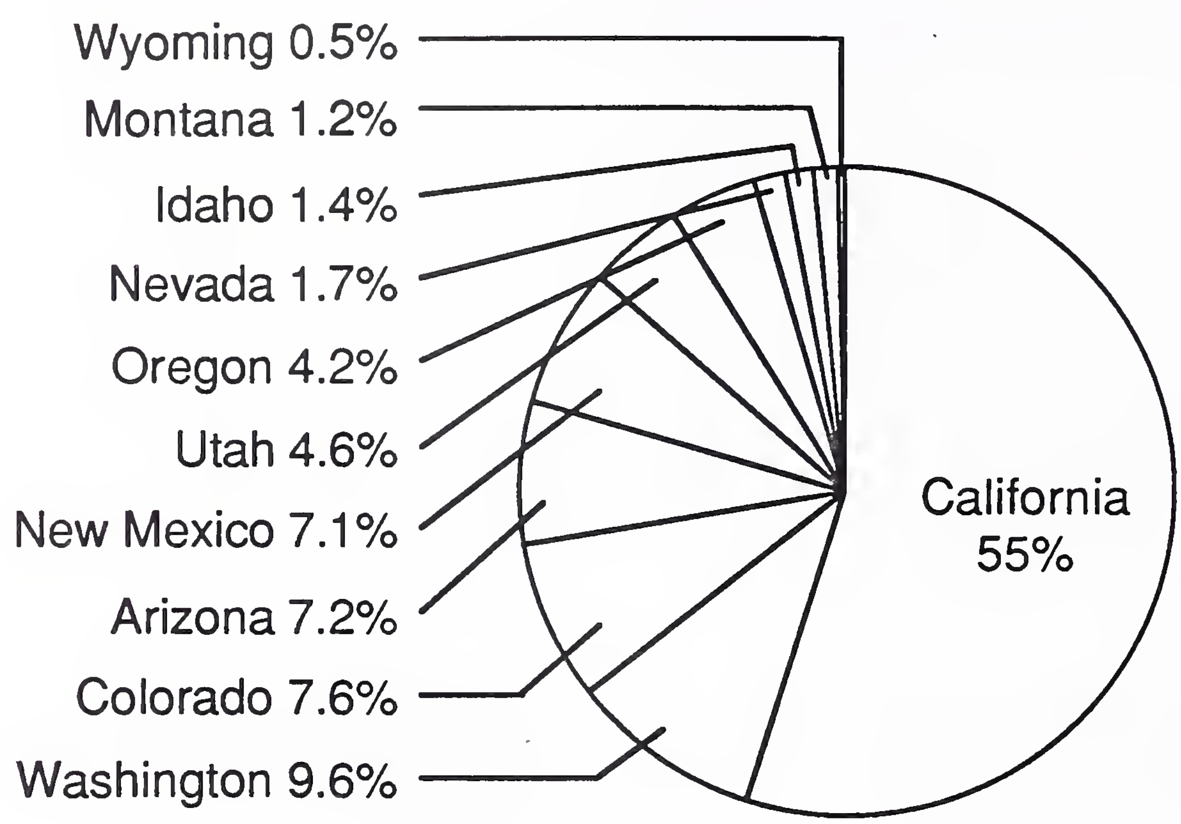


Market Size Observations

- In 1992:
    - The SI market pertaining to Andersen Consulting's Pacific Region Practice totaled $2.0 billion, California represents 55 percent of the market
    - The Professional Services market pertaining to the Andersen Consulting's Pacific Region Practice totaled $3.8 billion, California represents 60 percent of the market

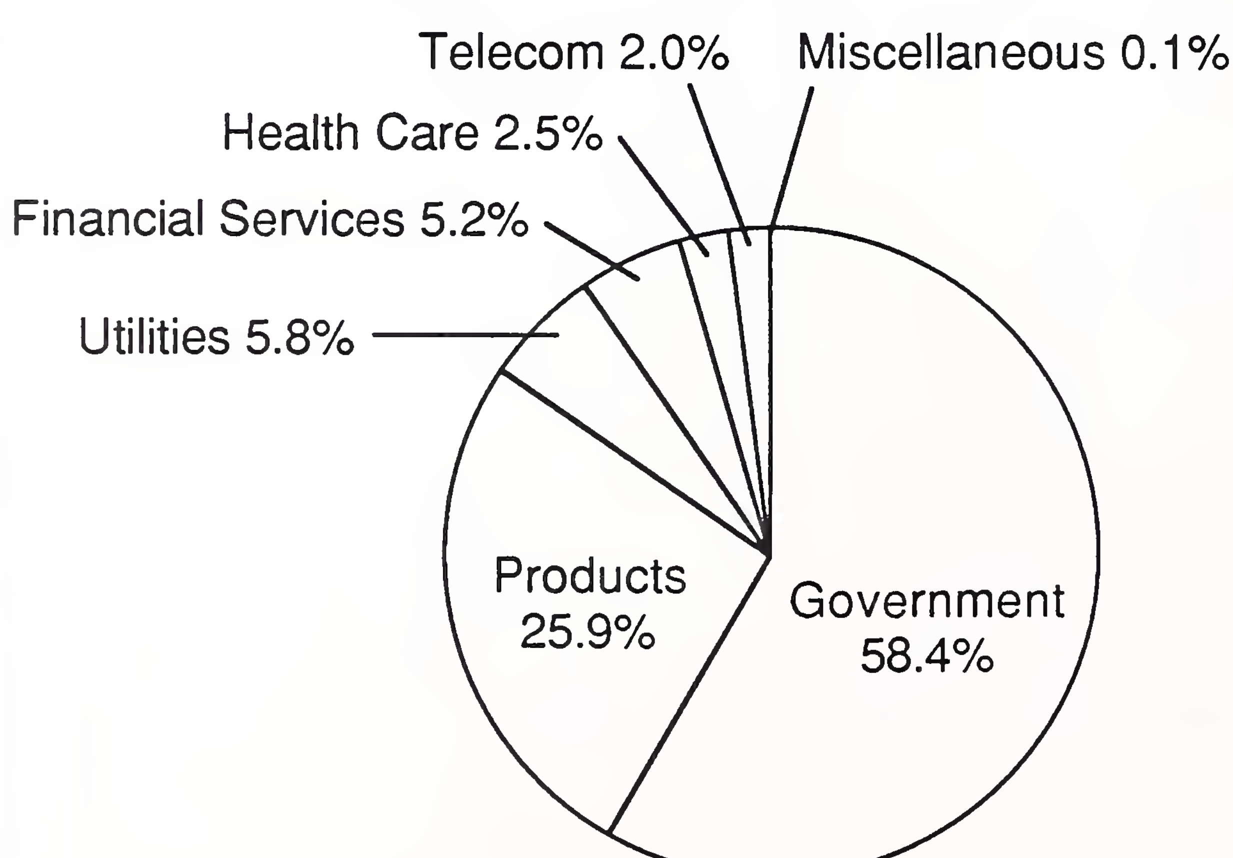
EXHIBIT IV-4

Pacific Region SI Area Segmentation, 1992



$2.0 Billion

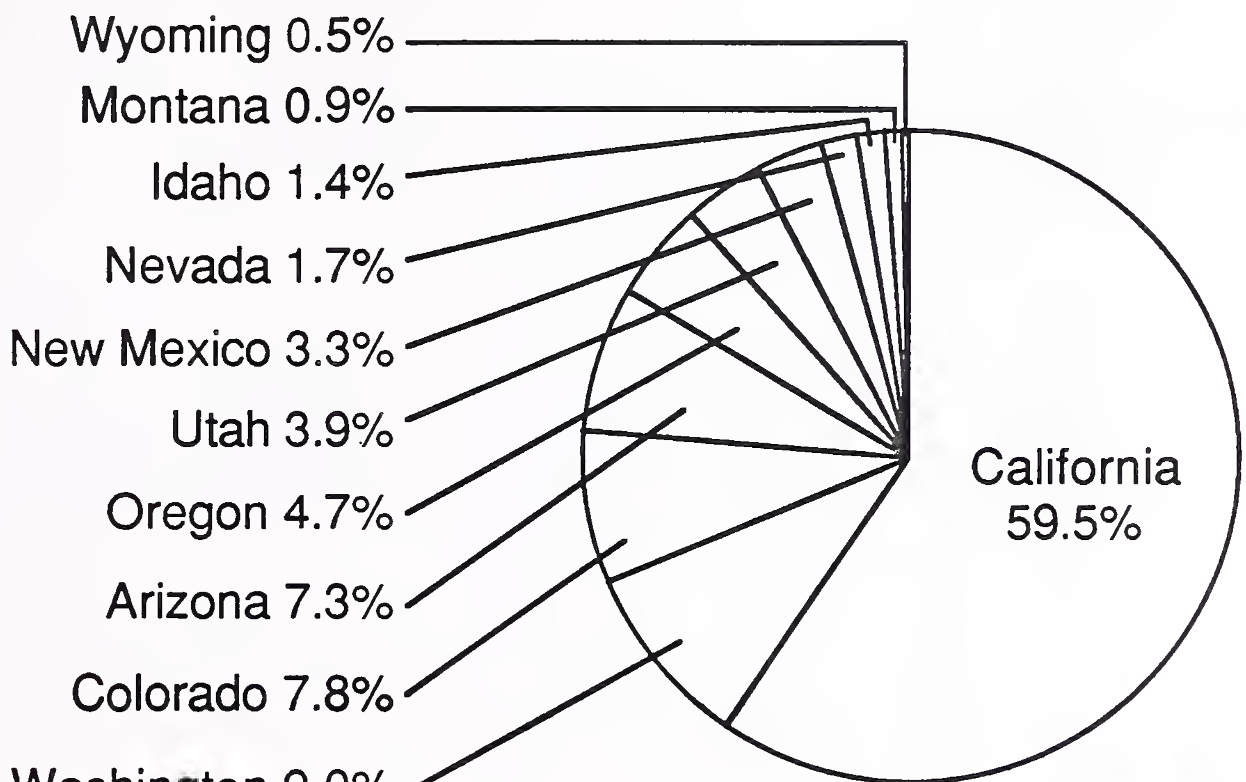
Pacific Region SI Industry Segmentation, 1992



$2.0 Billion

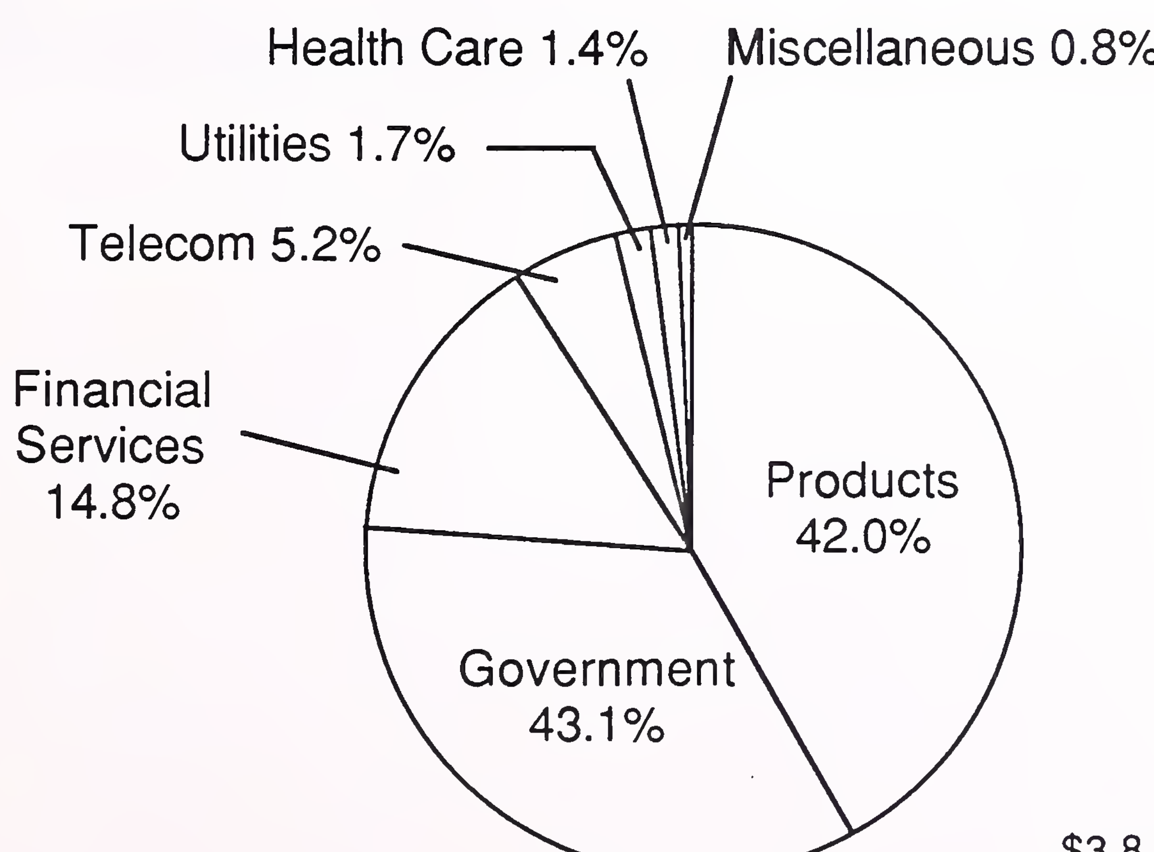
EXHIBIT IV-5

Pacific Region Professional Services Area Segmentation, 1992



$3.8 Billion

Pacific Region Professional Services Area Segmentation



$3.8 Billion

TOTAL PACIFIC REGION MARKET: SYSTEMS INTEGRATION

1992 ($ Millions)

Table IV-2

REGION SEGMENTATION	SI SUB-MODES				SI
	Equip.	S/W	Prof. Svs.	Other	Total
	$830	$141	$941	$74	$1,987
Arizona	59	10	69	5	144
California	461	78	512	41	1,092
Colorado	63	11	72	6	151
Idaho	11	2	13	1	27
Montana	10	2	12	1	24
New Mexico	60	10	65	6	140
Nevada	13	3	18	1	34
Organ	34	6	41	3	83
Utah	38	6	43	3	91
Washington	78	14	91	7	190
Wyoming	4	1	5	0	10
California	461	78	512	41	1,092
Rest of Region	369	64	429	34	895
CA % of Total Region	56%	55%	54%	55%	55%

TOTAL PACIFIC REGION MARKET: SYSTEMS INTEGRATION

1997 ($ Millions)

Table IV-3

REGION SEGMENTATION	SI SUB-MODES Equip. $1,670	S/W $357	Prof. Svs. $1,967	Other $149	SI Total $4,143
Arizona	118	26	141	11	296
California	950	200	1,092	83	2,326
Colorado	126	27	152	11	317
Idaho	22	5	26	2	54
Montana	18	4	22	2	46
New Mexico	109	23	126	10	268
Nevada	25	6	37	3	71
Organ	68	15	85	6	175
Utah	75	16	89	7	187
Washington	152	33	187	14	385
Wyoming	8	2	10	1	20
California	950	200	1,092	83	2,326
Rest of Region	720	156	875	65	1,817
CA % of Total Region	57%	56%	56%	56%	56%

TOTAL PACIFIC REGION MARKET: SYSTEMS INTEGRATION

1992 ($ Millions)

Table IV-4

INDUSTRY PRACTICES	SI SUB-MODES Equip.	S/W	Prof. Svs.	Other	Total SI
	$830	$141	$941	$74	$1,986
PRODUCTS	$246	$37	$212	$18	$514
Business Services	10	6	29	3	48
Discrete Manufacturing	180	21	95	10	307
Process Manufacturing	16	2	20	1	39
Retail Distribution	17	3	29	3	52
Transportation	12	2	20	1	35
Wholesale Distribution	11	2	20	1	34
FINANCIAL SERVICES	$29	$7	$63	$4	103
Banking/Finance	24	5	38	4	70
Insurance	5	3	25	1	33
TELECOM	$10	$3	$26	$0	39
Telecom	10	3	26	0	39
GOVERNMENT	$486	$79	$549	$45	$1,160
Federal Government	417	67	435	39	958
State Government	31	5	50	3	89
Local/Misc. Government	32	6	52	3	93
Education	6	2	12	0	19
HEALTHCARE	$17	$4	$27	$2	$50
Health Services	17	4	27	2	50
UTILITIES	$40	$10	$63	$5	$118
Utilities	40	10	63	5	118
Misc. Industries	1	0	1	0	2

TOTAL PACIFIC REGION MARKET: SYSTEMS INTEGRATION

1997 ($ Millions)

Table IV-5

INDUSTRY PRACTICES	SI SUB-MODES				Total SI
	Equip.	S/W	Prof. Svs.	Other	
	$1,670	$357	$1,967	$149	$4,143
PRODUCTS	$608	$114	$545	$46	$1,312
Business Services	29	18	84	7	138
Discrete Manufacturing	458	67	255	25	806
Process Manufacturing	29	6	38	2	75
Retail Distribution	42	11	75	7	134
Transportation	28	6	51	3	87
Wholesale Distribution	22	6	42	2	72
FINANCIAL SERVICES	$70	$22	$157	$10	$259
Banking/Finance	58	14	98	9	179
Insurance	12	7	59	2	80
TELECOM	$26	$9	$66	$1	$102
Telecom	26	9	66	1	102
GOVERNMENT	$876	$183	$1,049	$83	$2,191
Federal Government	749	152	825	72	1797
State Government	56	13	97	5	172
Local/Misc. Government	59	14	101	5	179
Education	13	4	26	1	43
HEALTHCARE	$27	$9	$46	$2	$84
Health Services	27	9	46	2	84
UTILITIES	$61	$20	$102	$7	$190
Utilities	61	20	102	7	190
Misc. Industries	2	1	2	0	4

TOTAL PACIFIC REGION MARKET: SYSTEMS INTEGRATION

1992 - 1997 CAGR

Table IV-6

INDUSTRY PRACTICES	SI SUB-MODES				Total SI CAGR
	Equip.	S/W	Prof. Svs.	Other	
	15%	20%	16%	15%	16%
PRODUCTS	20%	25%	21%	20%	21%
Business Services	22	26	24	23	24
Discrete Manufacturing	20	26	22	21	21
Process Manufacturing	13	20	14	13	14
Retail Distribution	20	25	21	20	21
Transportation	19	25	20	19	20
Wholesale Distribution	15	21	16	15	16
FINANCIAL SERVICES	19%	24%	20%	20%	20%
Banking/Finance	20	25	21	20	21
Insurance	18	22	19	18	19
TELECOM	21%	26%	21%	20%	21%
Telecom	21	26	21	20	21
GOVERNMENT	13%	18%	14%	13%	14%
Federal Government	12	18	14	13	13
State Government	13	20	14	13	14
Local/Misc. Government	13	20	14	13	14
Education	16	22	17	16	17
HEALTHCARE	10%	15%	11%	10%	11%
Health Services	10	15	11	10	11
UTILITIES	9%	14%	10%	9%	10%
Utilities	9	14	10	9	10
Misc. Industries	12%	0%	17%	0%	18%

TOTAL PACIFIC REGION MARKET: PROFESSIONAL SERVICES

1992 ($ Millions)

Table IV-7

REGION SEGMENTATION	Professional Services Sub-Modes			Total
	Cons.	Dev.	Ed & Tr	
	$903	$2,290	$559	$3,751
Arizona	67	167	41	275
California	538	1,362	330	2,230
Colorado	70	180	43	293
Idaho	12	31	8	51
Montana	8	21	5	34
New Mexico	28	77	20	125
Nevada	16	39	10	65
Organ	43	106	26	175
Utah	35	90	22	148
Washington	81	205	50	337
Wyoming	4	11	3	18
California	538	1,362	330	2,230
Rest of Region	365	928	229	1,521
CA % of Total Region	60%	59%	59%	59%

TOTAL PACIFIC REGION MARKET: PROFESSIONAL SERVICES

1997 ($ Millions)

Table IV-8

REGION SEGMENTATION	Professional Services Sub-Modes			Total
	Cons.	Dev.	Ed & Tr	
	$1,575	$3,295	$879	$5,749
Arizona	118	243	66	428
California	941	1,943	524	3,408
Colorado	122	259	68	449
Idaho	22	45	12	79
Montana	14	31	8	53
New Mexico	44	115	25	184
Nevada	28	59	16	103
Organ	75	152	42	269
Utah	61	132	34	227
Washington	142	299	79	519
Wyoming	8	17	4	29
California	941	1,943	524	3,408
Rest of Region	634	1,352	355	2,341
CA % of Total Region	60%	59%	60%	59%

TOTAL PACIFIC REGION MARKET: PROFESSIONAL SERVICES

1992 ($ Millions)

Table IV-9

INDUSTRY PRACTICES	Sub-Modes Cons.	Dev.	Ed & Tr	Total
	$903	$2,290	$559	$3,751
PRODUCTS	$390	$955	$230	$1,575
Business Services	21	51	11	83
Discrete Manufacturing	270	654	162	1,086
Process Manufacturing	63	154	37	253
Retail Distribution	9	23	5	37
Transportation	10	27	6	44
Wholesale Distribution	17	45	9	71
FINANCIAL SERVICES	$136	$344	$76	$556
Banking/Finance	78	197	43	319
Insurance	58	146	33	237
TELECOM	$41	$128	$26	$194
Telecom	41	128	26	194
GOVERNMENT	$294	$783	$201	$1,278
Federal Government	110	328	93	531
State Government	88	218	51	358
Local/Misc. Government	92	227	54	373
Education	4	10	2	16
HEALTHCARE	$13	$33	$7	$54
Health Services	13	33	7	54
UTILITIES	$21	$28	$15	$64
Utilities	21	28	15	64
Misc. Industries	$7	$19	$5	$31

TOTAL PACIFIC REGION MARKET: PROFESSIONAL SERVICES

1992 ($ Millions)

Table IV-10

INDUSTRY PRACTICES	Sub-Modes			Total
	Cons.	Dev.	Ed & Tr	
	$1,575	$3,295	$879	$5,749
PRODUCTS	$690	$1,267	$374	$2,331
Business Services	34	68	17	118
Discrete Manufacturing	482	850	263	1595
Process Manufacturing	119	217	65	401
Retail Distribution	14	32	7	54
Transportation	16	37	9	61
Wholesale Distribution	26	63	14	102
FINANCIAL SERVICES	$224	$454	$125	$802
Banking/Finance	126	265	69	461
Insurance	98	188	55	341
TELECOM	$91	$237	$62	$390
Telecom	91	237	62	390
GOVERNMENT	$494	$1,209	$272	$1,974
Federal Government	136	496	84	716
State Government	171	341	90	603
Local/Misc. Government	179	356	94	629
Education	8	16	4	27
HEALTHCARE	$23	$48	$12	$83
Health Services	23	48	12	83
UTILITIES	$42	$54	$28	$124
Utilities	42	54	28	124
Misc. Industries	$11	$27	$7	$45

TOTAL PACIFIC REGION MARKET: PROFESSIONAL SERVICES

1992 - 1997 CAGR

Table IV-11

INDUSTRY PRACTICES	Sub-Modes			CAGR
	Cons.	Dev.	Ed & Tr	
	12%	8%	9%	9%
PRODUCTS	12%	6%	10%	8%
Business Services	10	6	8	7
Discrete Manufacturing	12	5	10	8
Process Manufacturing	14	7	12	10
Retail Distribution	9	7	8	7
Transportation	9	6	8	7
Wholesale Distribution	9	7	8	7
FINANCIAL SERVICES	10%	6%	10%	8%
Banking/Finance	10	6	10	8
Insurance	11	5	11	8
TELECOM	17%	13%	19%	15%
Telecom	17	13	19	15
GOVERNMENT	11%	9%	6%	9%
Federal Government	4	9	-2	6
State Government	14	9	12	11
Local/Misc. Government	14	9	12	11
Education	14	9	9	10
HEALTHCARE	12%	8%	10%	9%
Health Services	12	8	10	9
UTILITIES	15%	14%	14%	14%
Utilities	15	14	14	14
Misc. Industries	10%	7%	9%	8%

V

Appendix

DEFINITION OF TERMS

A. Market Sizes And Forecasts/User Expenditures

All information services market sizes and forecasts are estimates of *User Expenditures* for information services. When questions arise about the proper place to count these expenditures, INPUT addresses them from the user's viewpoint: expenditures are categorized according to what users perceive they are buying.

By focusing on user expenditures, INPUT avoids two problems which are related to the distribution channels for various categories of services:

- Double counting, which can occur by estimating total vendor revenues when there is significant reselling within the industry (e.g., software sales to turnkey vendors for repackaging and resale to end users)

- Missed counting, which can occur when sales to end users go through indirect channels such as mail order retailers

Captive Information Services User Expenditures are expenditures for products and services provided by a vendor that is part of the same parent corporation as the user. These expenditures are not included in INPUT forecasts.

Non-captive Information Services User Expenditures are expenditures that go to vendors that have a different parent corporation than the user. It is these expenditures which constitute the information services market analyzed by INPUT and that are included in INPUT forecasts.

B. Information Services

The following *Definition of Terms* pertain to the information services within the *Regional Market Opportunity Analysis* for Andersen Consulting.

1. Systems Integration (SI)

Systems integration is a vendor service that provides a complete solution to an information system, networking or automation development requirement through the custom selection and implementation of a variety of information system products and services. A systems integrator is responsible for the overall management of a systems integration contract and is the single point of contact and

responsibility to the buyer for the delivery of the specified system function, on schedule and at the contracted price. (*Refer to Exhibit V-1.*)
The components of a systems integration project are the following:

- *Equipment* - information processing and communications equipment required to build the systems solution. This component may include custom as well as off-the-shelf equipment to meet the unique needs of the project. The systems integration equipment category excludes turnkey systems by definition.

- *Software products* - prepackaged applications and systems software products.

- *Professional services* - the value-added component that adapts the equipment and develops, assembles, or modifies the software and hardware to meet the system's requirements. It includes all of the professional services activities required to develop, implement, and if included in the contract, operate an information system, including consulting, program/project management, design and integration, software development, education and training, documentation, and systems operations and maintenance.

- *Other services* - most systems integration contracts include other services and product expenditures that are not classified elsewhere. This category includes miscellaneous items such as engineering services, automation equipment, computer supplies, business support services and supplies, and other items required for a smooth development effort.

2. Professional Services

This category includes four submodes: consulting, education and training, software development, and applications management. *Exhibit V-2* provides additional detail.

- *Consulting:* Services include management consulting (related to information systems), information systems re-engineering, information systems consulting, feasibility analysis and cost-effectiveness studies, and project management assistance. Services may be related to any aspect of the information system, including equipment, software, networks and systems operations.

EXHIBIT V-1

Products/Services in Systems Integration Projects

Equipment
• Information systems
• Communications
Software Products
• Systems software
• Applications software
Professional Services
• Consulting
- Feasibility and trade-off studies
- Selection of equipment, network and software
• Program/project management
• Design/integration
- Systems design
- Installation of equipment, network, and software
- Demonstration and testing
• Software development
- Modification of software packages
- Modification of existing software
- Custom development of software
• Education/training and documentation
• Systems operations/maintenance
Other Miscellaneous Products/Services
• Site preparation
• Data processing supplies
• Processing/network services
• Data/voice communication services

EXHIBIT V-2

Professional Services Market Structure

- Professional Services
  - Applications Management**
    - Applications Maintenance
    - Application Development
    - Application Support
  - Software Development/ Maintenance
    - User Requirements Definition
    - Systems Design
    - System Conversion
    - Data Base Design
    - Programming
    - Testing
    - System Modification
    - Documentation/ Technical Writing
    - Network Development
    - Other
  - Consulting*
    - Installation Planning
    - Network Planning and Design
    - Information Systems Audit
    - IS Planning
    - IS Security/Audit
    - System Evaluation
    - IS Personnel Planning
    - Systems Analysis
    - IS Policies and Procedures Development
    - Project Management
    - Other
  - Education & Training*
    - Computer Operations Training
    - IS Management Training
    - Analyst/ Programmer Training
    - Systems Use Training
    - Video Instruction
    - Other

*Related to computer systems, topics, or issues

**Vendor assumes full responsibility on contracted longer term basis

- *Education and Training:* Services that provide training and education or the development of training materials related to information systems and services for the information systems professional and the user, including computer-aided instruction, computer-based education, and vendor instruction of user personnel in operations, design, programming, and documentation. Education and training provided by school systems is not included. General education and training products are included as a cross-industry market sector.

- *Software Development:* Services include user requirements definition, systems design, contract programming, documentation, and implementation of software performed on a custom basis. Conversion and maintenance services are also included.

- *Applications Management*: The vendor has full responsibility for maintaining and upgrading some or all of the application systems that a client uses to support business operations and may develop and implement new application systems for the client.

  An applications management contract differs from traditional software development in the form of the client/vendor relationship. Under traditional software development services the relationship is project based. Under applications management it is time and function based.

  These services may be provided in combination or separately from platform systems operations.

C.

Questionnaire Definitions

1. Questions 7 and 17:

Service	Definition
Business Integration	Services that assist a company to integrate corporate goals, business processes, information systems, and corporate culture in an effort to improve business efficiency.
Systems Integration	One-time contracts where the outside service firm assumes responsibility for the complete design and implementation of a finished system
Consulting Services	Services include management consulting (related to IS), information systems re-engineering, information systems consulting, feasibility analysis, project management assistance, etc.
Software Development/ Maintenance	Contracting for professional services to support implementation. (Detail design, project management, code development, etc.).
Applications Management	The outside service firm has full responsibility for maintaining and upgrading some or all of the application systems that support business operations.

2. Question 9:

Skill-Set	**Definition**
Network Integration & Management	The planning, design, and implementation of a network architecture; and the network management infrastructure.
Organizational Change Expertise	Services that help organizations to implement new management initiatives, as well as services that help organizations adapt to organizational change through professional education, training, and communication management programs.
Software Development	Services include user requirements definition, systems design, contract programming, documentation, and implementation of software performed on a custom basis.
Business Strategy Expertise	Management consulting services that help organizations address core business issues.
Training	Services that provide training and education related to information systems and services.
Technology Strategy Expertise	Services that help organizations to manage and implement new technology effectively.

(Question 9 continued)

Skill-Set	Definition
Business Process Design/Re-design Expertise	Services that help organizations to integrate technology with operations and people.
CASE	Computer-aided software engineering: tool that helps application development by integrating several factions of the developmental process (requirements definition, systems analysis, project planning/management, code generation) .
Client/Server	A client/server architecture allows users at any location to access any of the applications within the enterprise and any application information need to perform the business need
Vertical Industry Knowledge	Business and technical expertise pertaining to a particular vertical market (Banking & Finance, Healthcare, etc).
Image Processing	Expertise in imaging technology, including expertise in graphic technology.
LANs & WANs	**LAN** (local area network) A data communication network that allows communication between computers and peripherals in a local environment. **WAN** (wide are network) A data communications network that allows remote communication over a public and private packet switching network.
Multimedia	The combination of various medias (audio, graphics, text, video) on the desktop computer.
Data Base Construction	Expertise in customizing a database solution to a clients specific needs.
Work Flow Automation	Automating the departmental processes
Project Management	Expertise pertaining to the on-site management and implementation of a particular project.

D. Industry Sector Definitions

INPUT structures the information services market into industry sectors such as process manufacturing, insurance, transportation, etc. The definitions of these sectors are based on the 1987 revision of the Standard Industrial Classification (SIC) code system. The specific industries (and their SIC codes) included under these industry sectors are detailed in *Exhibit V-3*.

Note: SIC code 88 is Personal Households. INPUT does not currently analyze or forecast information services in this market sector.

EXHIBIT V-3

Industry Sector Definitions

Industry Sector	SIC Code	Description
Discrete Manufacturing	23xx	Apparel and other finished products
	25xx	Furniture and fixtures
	27xx	Printing, publishing and allied industries
	31xx	Leather and leather products
	34xx	Fabricated metal products, except machinery and transportation equipment
	35xx	Industrial and commercial machinery and computer equipment
	36xx	Electronic and other electrical equipment and components, except computer equipment
	37xx	Transportation equipment
	38xx	Instruments; photo/med/optical goods; watches/clocks
	39xx	Miscellaneous manufacturing industry
Process Manufacturing	10xx	Metal mining
	12xx	Coal mining
	13xx	Oil and gas extraction
	14xx	Mining/quarrying nonmetalic minerals
	20xx	Food and kindred products
	21xx	Tobacco products
	22xx	Textile mill products
	24xx	Lumber and wood products, except furniture
	26xx	Paper and allied products
	28xx	Chemicals and allied products
	29xx	Petroleum refining and related industries
	30xx	Rubber and miscellaneous plastic products
	32xx	Stone, clay, glass and concrete products
	33xx	Primary metal industries
Transportation Services	40xx	Railroad transport
	41xx	Public transit/transport
	42xx	Motor freight transport/warehousing
	43xx	U.S. Postal Service
	44xx	Water transportation
	45xx	Air transportation (including airline reservation services in 4512)
	46xx	Pipelines, except natural gas
	47xx	Transportation services (including 472x, arrangement of passenger transportation)

EXHIBIT 1V-3 (CONT.)

Industry Sector Definitions

Industry Sector	SIC Code	Description
Business Services	65xx	Real estate
	70xx	Hotels, rooming houses, camps, and other lodging places
	72xx	Personal services
	73xx	Business services (except hotel reservation services in 7389)
	7389x	Hotel reservation services
	75xx	Automotive repair, services and parking
	76xx	Miscellaneous repair services
	78xx	Motion pictures
	79xx	Amusement and recreation services
	81xx	Legal services
	83xx	Social services
	84xx	Museums, art galleries, and botanical/zoological gardens
	86xx	Membership organizations
	87xx	Engineering, accounting, research, management, and related services
	89xx	Miscellaneous services
Federal Government	9xxx	
State and Local Government	9xxx	
Miscellaneous Industries	01xx	Agricultural production - crops
	02xx	Agricultural production - livestock/animals
	07xx	Agricultural services
	08xx	Forestry
	09xx	Fishing, hunting and trapping
	15xx	Building construction - general contractors, operative builders
	16xx	Heavy construction - contractors
	17xx	Construction - special trade contractors

EXHIBIT V-3 (CONT.)

Industry Sector Definitions

Industry Sector	SIC Code	Description
Telecommunications	48xx	Communications
Utilities	49xx	Electric, gas and sanitary services
Retail Distribution	52xx 53xx 54xx 55xx 56xx 57xx 58xx 59xx	Building materials General merchandise stores Food stores Automotive dealers, gas stations Apparel and accessory stores Home furniture, furnishings and accessory stores Eating and drinking places Miscellaneous retail
Wholesale Distribution	50xx 51xx	Wholesale trade - durable goods Wholesale trade - nondurable goods
Banking and Finance	60xx 61xx 62xx 67xx	Depositary institutions Nondepositary institutions Security and commodity brokers, dealers, exchanges and services Holding and other investment offices
Insurance	63xx 64xx	Insurance carriers Insurance agents, brokers and services
Health Services	80xx	Health services
Education	82xx	Educational services

QUESTIONNAIRE

Future Requirements For Business Integration And Information Services

1. What is your position/title? ______________________________

2. Is your information systems organization at the corporate or division level?

   Corporate____ Division_____ Other (specify)______

3. What is the size of your company?

a.	**Revenue:**	b.	**Number of Employees:**
3.1	__ $100 to $500 Million	3.5	__ Under 500
3.2	__ $500 to $1 Billion	3.6	__ 500 to 1,000
3.3	__ $1Billion to $10 Billion	3.7	__ 1,000 to 5,000
3.4	__ Over $10 Billion	3.8	__ 5,000 to 10,000
		3.9	__ Over 10,000

4.1 Has, or will, your company utilize an outside consultant to assist with overall company business re-engineering activities **Yes/No**

If yes, who is the budget decision-maker involved with the business re-engineering activities?

4.2 Title: ____________________

4.3 Name: ____________________

4.4 Additionally, which business unit funds the re-engineering activities? __________

5.1 Is your company planning to re-architect its computing environment during the next two years? **Yes/No**

5.2 If yes please indicate the primary computing environment (P) and secondary computing environment (S) for your network architecture, data processing, and data residency. Indicate how it is structured currently **(a)** and how it will be structured in the future **(b)** .

Computing Environment	Network Architecture		Data Processing		Data Residency	
	Now (a)	Future (b)	Now (a)	Future (b)	Now (a)	Future (b)
Hierarchical (Host Dominated)						
Distributed Dominated (LANs, Client/Server)						

5.3 If your company is migrating from a Host to a non-Host environment, how will your remnant Hosts (legacy systems) fit into the new computing environment?

____

____

5.4 Is your company expecting any major impediments pertaining to the Host to non-Host environment migration process? **Yes/No**

5.5 If yes, please describe the major impediment(s).

____

____

____

6. Of the following requirements listed below, please indicate whether your company **(a)** Is likely to need that requirement filled over the next three years (Y/N); and if so, **(b)** Whether it is likely to look outside for service support (Y/N).

Number	Company Requirement	Need (a)	Outside (b)
6.1	Developing Strategic Systems or Architectural Plans		
6.2	Developing New Applications		
6.3	Re-engineering Existing Applications		
6.4	Integrating Existing Applications		
6.5	Integrating or Upgrading Networks		
6.6	Re-engineering Business Processes		
6.7	Migrating to New Data Base Environments		
6.8	Downsizing of Existing Applications		

7. For each type of service, please indicate the outside service firm that your company has used most often or would consider using, and why.

Number	Service	Definition (If Necessary)	Provider	Why?
7.1	Business Integration	Services that assist a company to integrate corporate goals, business processes, information systems, and corporate culture in an effort to improve business efficiency.		
7.2	Systems Integration	One-time contracts where the outside service firm assumes responsibility for the complete design and implementation of a finished system		
7.3	Consulting Services	Services include management consulting (related to IS), information systems re-engineering, information systems consulting, feasibility analysis, project management assistance, etc.		
7.4	Software Development/ Maintenance	Contracting for professional services to support implementation. (Detail design, project management, code development, etc.).		
7.5	Applications Management	The outside service firm has full responsibility for maintaining and upgrading some or all of the application systems that support business operations.		

8. Please list three key projects planned over the next three years which include one or more of the types of outside services that were defined in question number seven, and indicate the type of service involved.

Number	Project	Service Type	Year Planned
8.1			
8.2			
8.3			

9. On a scale of 1 to 5, with 1 being not important and 5 being very important, please rate each of the following skill-sets in terms of its importance as it relates to influencing the selection of an outside service firm.

(1 = not important; 5 = very important)

Number	Skill-Set	Rating
9.1	Network Integration & Management	
9.2	Organizational Change Expertise	
9.3	Software Development	
9.4	Business Strategy Expertise	
9.5	Technology Strategy Expertise	
9.6	Training	
9.7	Business Process Design/Re-design Expertise	
9.8	CASE	
9.9	Client/Server	
9.10	Vertical Industry Knowledge	
9.11	Image Processing	
9.12	LANs & WANs	
9.13	Multimedia	
9.14	Data Base Integration	
9.15	Work Flow Automation	
9.16	Project Management	

9.17 Other (Explain):

____

____

10. How would you rate each of the IT consulting service firms listed below relative to their ability to meet your needs for Business Integration, Systems Integration, and Professional Services?
(1 = not qualified; 5 = very qualified; 6 = don't know)

Number	Vendor	Business Integration Rating	Systems Integration Rating	Professional Services Rating
10.1	Andersen Consulting			
10.2	Digital Equipment Corp.			
10.3	EDS			
10.4	IBM			
10.5	Price Waterhouse			
10.6	Other:			
10.7	Other:			

11. Taking two of the vendors that you have rated, what do you see as their specific strengths and weaknesses?

Number	Vendor	Strengths	Weaknesses
11.1			
11.2			

12. What is the approximate amount of your information systems budget for 1993?

Budget $________ Million

13. Does your IS budget represent the entire IS budget for your company **Yes/No**

14. If no please indicate how the budget is broken out among the following three categories (must equal 100%).

	Budget Responsibility	Percent of Total
14.1	Information Systems	______
14.2	User Departments	______
14.3	Other IS Groups	______
14.4	Total Budget	100%

15. What percent is your 1994 IS budget planned to change from your 1993 expenditures?

______ % (+/-)

16. What percent of your total budget will outside services represent in 1993 and 1994?

16.1 _____% 1993
16.2 ____ % 1994

17. Please indicate the percentage of your 1993 **outside services budget** that is represented by each of the following types of services. Also, indicate whether that service will increase (I), decrease (D) or remain the same (R) over the next three years.

Number	Service	Definition (If Necessary)	I/D/R	%
17.1	Business Integration	Services that assist a company to integrate corporate goals, business processes, information systems, and corporate culture in an effort to improve business efficiency.		
17.2	Systems Integration	One-time contracts where the outside service firm assumes responsibility for the complete design and implementation of a finished system		
17.3	Consulting Services	Services include management consulting (related to IS), information systems re-engineering, information systems consulting, feasibility analysis, project management assistance, etc.		
17.4	Software Development/ Maintenance	Contracting for professional services to support implementation. (Detail design, project management, code development, etc.).		
17.5	Applications Management	The outside service firm has full responsibility for maintaining and upgrading some or all of the application systems that support business operations.		

18. In summary, how does your company plan to address the following systems-related issues?

18.1. Tying the information systems to the business plan

____

____

____

18.2. The integration of systems and business processes

____

____

____

18.3. Network integration and management

____

____

____

18.4. Justifying information systems investment

FIELD RESEARCH DATA

Response Matrix: Use of Outside Services/ Plans To Re-architect Computing Environment

Table V-1

INDUSTRY	Group 1				Group 2				Group 3				Group 4			
PRACTICE	N/N	Y/Y	N/Y	Y/N	N/N	Y/Y	N/Y	Y/N	N/N	Y/Y	N/Y	Y/N	N/N	Y/Y	N/Y	Y/N
PRODUCTS	19	3	6	2	4	10	1	4	4	5	10	1	1	1	0	0
Business Services	--	--	--	--	--	2	--	--	--	--	1	--	--	--	--	--
Discrete Manufacturing	2	0	3	1	2	5	1	2		2	3	1	1	--	--	--
Process Manufacturing	5	1	3	--	--	1	--	1	3	3	3	--	--	--	--	--
Retail Distribution	2	1	--	1	--	--	--	1	--	--	--	--	--	--	--	--
Transportation	1	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
Wholesale Distribution	9	1	--	--	2	2	--	--	1	--	2	--	--	1	--	--
FINANCIAL SERVICES	1	2	1	0	1	1	0	0	0	0	0	1	1	1	0	0
Banking/Finance	--	--	1	--	1	1	--	--	--	--	--	--	--	1	--	--
Insurance	1	2	--	--	--	--	--	--	--	--	--	1	1	--	--	--
TELECOM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
GOVERNMENT	7	3	1	2	3	0	1	0	5	1	0	0	0	0	0	0
Federal Government	3	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--
State/Local	2	3	--	2	1	--	--	--	1	--	--	--	--	--	--	--
Education	2	0	1	--	--	--	1	--	4	1	--	--	--	--	--	--
HEALTHCARE	0	5	1	1	0	0	0	0	0	0	1	1	0	0	0	0
UTILITIES	1	1	0	1	1	1	1	0	0	1	2	0	0	0	0	0
MISCELLANEOUS	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
TOTAL INDUSTRY	29	14	9	6	10	12	3	4	10	8	14	3	2	2	0	0

Responses Indicating Requirements Plans: Groups 1 - 4 (Next Three Years)

Table V-2

Company	Products				Financial Services				Telecom			
Requirement	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	44	27	0	71	8	2	0	10	2	0	1	3
Developing New Applications	55	17	0	72	7	1	1	9	3	0	0	3
Re-engineering Existing Applications	44	23	1	68	5	2	1	8	3	0	0	3
Integrating Existing Applications	50	20	0	70	7	1	1	9	2	1	0	3
Integrating or Upgrading Networks	53	16	1	70	5	3	1	9	3	0	0	3
Re-engineering Business Processes	46	24	0	70	6	2	1	9	3	0	0	3
Migrating to New Database Environments	41	26	2	69	5	3	1	9	2	1	0	3
Downsizing of Existing Applications	36	33	1	70	2	5	1	8	2	1	0	3

Yes=Y; No=N; Don't Know=DK; Total=T

Responses Indicating Requirements Plans: Groups 1 - 4 (Next Three Years)

Table V-2 (Cont.)

Company	Government				Healthcare				Utilities			
Requirement	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	14	12	1	27	6	3	0	9	7	2	1	10
Developing New Applications	18	7	1	26	6	3	0	9	5	4	1	10
Re-engineering Existing Applications	21	6	0	27	7	2	0	9	7	3	0	10
Integrating Existing Applications	21	6	0	27	7	2	0	9	6	4	0	10
Integrating or Upgrading Networks	24	3	0	27	6	1	0	7	8	2	0	10
Re-engineering Business Processes	14	13	0	27	5	4	0	9	7	2	1	10
Migrating to New Database Environments	16	10	0	26	5	3	0	8	7	3	1	11
Downsizing of Existing Applications	18	11	0	29	4	5	0	9	3	6	1	10

Yes=Y; No=N; Don't Know=DK; Total=T

Responses that Plan Requirement Fulfillment: Views on Outside Services, Groups 1 - 4 (Next Three Years)

Table V-3

Company	Products				Financial Services				Telecom			
Requirement	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	14	24	6	44	3	4	1	8	0	2	0	2
Developing New Applications	20	27	8	55	3	4	0	7	2	1	0	3
Re-engineering Existing Applications	15	22	7	44	2	3	0	5	2	1	0	3
Integrating Existing Applications	17	23	10	50	3	4	0	7	2	0	0	2
Integrating or Upgrading Networks	20	26	7	53	1	3	1	5	2	1	0	3
Re-engineering Business Processes	11	24	11	46	3	2	1	6	2	1	0	3
Migrating to New Database Environments	13	20	8	41	2	3	0	5	2	0	0	2
Downsizing of Existing Applications	9	19	8	36	1	1	0	2	2	0	0	2

Yes=Y; No=N; Don't Know=DK; Total=T

Responses that Plan Requirement Fulfillment: Views on Outside Services, Groups 1 - 4 (Next Three Years)

Table V-3 (Cont.)

Company	Government				Healthcare				Utilities			
Requirement	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	4	7	3	14	4	1	1	6	3	1	3	7
Developing New Applications	3	11	4	18	4	2	0	6	2	2	1	5
Re-engineering Existing Applications	4	13	4	21	2	4	1	7	3	3	1	7
Integrating Existing Applications	4	13	4	21	3	3	1	7	4	1	1	6
Integrating or Upgrading Networks	2	18	4	24	4	2	0	6	3	3	2	8
Re-engineering Business Processes	1	8	5	14	2	2	1	5	3	2	2	7
Migrating to New Database Environments	1	8	7	16	4	1	0	5	4	1	2	7
Downsizing of Existing Applications	3	9	6	18	1	2	1	4	1	1	1	3

Yes=Y; No=N; Don't Know=DK; Total=T

Responses Indicating Requirements Plans: Groups 2 - 4 (Next Three Years)

Table V-4

Company	Products				Financial Services				Telecom			
Requirement	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	30	10	0	40	5	1	0	6	2	0	1	3
Developing New Applications	32	8	0	40	3	1	1	5	3	0	0	3
Re-engineering Existing Applications	29	10	1	40	3	0	1	4	3	0	0	3
Integrating Existing Applications	34	6	0	40	3	1	1	5	2	1	0	3
Integrating or Upgrading Networks	31	7	1	39	3	1	1	5	3	0	0	3
Re-engineering Business Processes	32	7	0	39	3	1	1	5	3	0	0	3
Migrating to New Database Environments	31	7	2	40	3	1	1	5	2	1	0	3
Downsizing of Existing Applications	26	13	1	40	1	2	2	5	2	1	0	3

Yes=Y; No=N; Don't Know=DK; Total=T

Responses Indicating Requirements Plans: Groups 2 - 4 (Next Three Years)

Table V-4 (Cont.)

Company	Government				Healthcare				Utilities			
Requirement	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	6	5	1	12	1	1	0	2	5	1	0	6
Developing New Applications	9	2	1	12	2	0	0	2	5	1	0	6
Re-engineering Existing Applications	10	2	0	12	2	0	0	2	5	1	0	6
Integrating Existing Applications	9	3	0	12	2	0	0	2	4	2	0	6
Integrating or Upgrading Networks	11	1	0	12	2	0	0	2	5	1	0	6
Re-engineering Business Processes	7	5	0	12	2	0	0	2	4	1	1	6
Migrating to New Database Environments	8	4	0	12	1	1	0	2	5	1	0	6
Downsizing of Existing Applications	7	5	0	12	2	0	0	2	3	2	0	5

Yes=Y; No=N; Don't Know=DK; Total=T

Responses that Plan Requirement Fulfillment: Views on Outside Services, Groups 2 - 4 (Next Three Years)

Table V-5

Company	Products				Financial Services				Telecom			
Requirement	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	10	16	4	30	1	3	1	5	0	2	0	2
Developing New Applications	11	13	8	32	1	2	0	3	2	1	0	3
Re-engineering Existing Applications	11	13	5	29	1	2	0	3	2	1	0	3
Integrating Existing Applications	13	14	7	34	1	2	0	3	2	0	0	2
Integrating or Upgrading Networks	14	13	4	31	1	2	0	3	2	1	0	3
Re-engineering Business Processes	7	17	8	32	1	2	0	3	2	1	0	3
Migrating to New Database Environments	8	16	7	31	1	2	0	3	2	0	0	2
Downsizing of Existing Applications	6	13	7	26	0	1	0	1	2	0	0	2

Yes=Y; No=N; Don't Know=DK; Total=T

Responses that Plan Requirement Fulfillment: Views on Outside Services, Groups 2 - 4 (Next Three Years)

Table V-5 (Cont.)

Company	Government				Healthcare				Utilities			
Requirement	Y	N	DK	T	Y	N	DK	T	Y	N	DK	T
Developing Strategic Systems or Architecture Plans	2	4	0	6	0	0	1	1	3	1	1	5
Developing New Applications	2	6	1	9	1	1	0	2	2	2	1	5
Re-engineering Existing Applications	2	7	1	10	0	1	1	2	2	2	1	5
Integrating Existing Applications	1	7	1	9	0	1	1	2	3	0	1	4
Integrating or Upgrading Networks	0	10	1	11	1	1	0	2	2	2	1	5
Re-engineering Business Processes	0	5	2	7	0	1	1	2	2	1	1	4
Migrating to New Database Environments	0	5	3	8	0	1	0	1	3	1	1	5
Downsizing of Existing Applications	0	4	3	7	0	1	1	2	1	1	1	3

Yes=Y; No=N; Don't Know=DK; Total=T

Budget Plans for Group 2 Organizations

Table V-6

INDUSTRY PRACTICE/ Location	IS Budget ($Millions)	Represents Total IS Budget (Y/N)	Growth Rate 1993 - 1994	% Spent for Outside Services: 1993	% Spent for Outside Services: 1994
PRODUCTS					
Business Services					
CA, San Francisco	9.0	No	5%	- -	- -
AZ, Phoenix	2.5	- -	0	5%	5%
Discrete Manufacturing					
CA, Los Angeles	63.0	Yes	- -	25	25
CA, Los Angeles	40.0	Yes	0	7	7
AZ, Phoenix	20.0	Yes	0	0	0
CA, San Francisco	19.0	Yes	- -	- -	- -
CA, San Francisco	5.0	Yes	- -	- -	- -
CA, Los Angeles	1.5	Yes	- -	- -	- -
CA, San Francisco	0.45	No	50	- -	- -
CA, San Francisco	0.05	No	10	40	40
Process Manufacturing					
CA, San Francisco	2.0	No	0	15	15
CA, Los Angeles	0.02	No	- -	0	0
Wholesale					
CA, Los Angeles	8.0	Yes	10	2	2
OR, Portland	6.8	Yes	20	- -	- -
UT, Salt Lake	0.1	Yes	0	- -	- -

Budget Plans for Group 2 Organizations

Table V-6 (Cont.)

INDUSTRY PRACTICE/ Location	IS Budget ($Millions)	Represents Total IS Budget (Y/N)	Growth Rate 1993 - 1994	% Spent for Outside Services: 1993	% Spent for Outside Services: 1994
FINANCIAL SERVICES					
Banking & Finance					
CA, San Francisco	4.6	Yes	3%	- -	- -
CA, Los Angeles	1.4	Yes	3	- -	- -
GOVERNMENT					
Federal Government					
CA, Los Angeles	1.0	No	5	0	0
CA, San Francisco	0.2	No	<50>	0	0
State & Local Government					
CA, Los Angeles	70.0	No	<15>	- -	- -
ID, Boise	2.5	No	10	2	2
Education					
AZ, Phoenix	30.0	Yes	0	0	0
AZ, Phoenix	18.0	Yes	<4>	0	0
UTILITIES					
Utilities					
CA, Los Angeles	2.0	Yes	5	- -	- -
WA, Seattle	0.1	No	0	28	28
MT, Helena	0.07	Yes	0	0	0

Budget Plans for Group 3 Organizations

Table V-7

INDUSTRY PRACTICE/ Location	IS Budget ($Millions)	Represents Total IS Budget (Y/N)	Growth Rate 1993 - 1994	% Spent for Outside Services: 1993	% Spent for Outside Services: 1994
PRODUCTS					
Business Services					
CA, Los Angeles	5.5	No	0%	2%	2%
Discrete Manufacturing					
CA, San Francisco	90.0	Yes	<10>	5	5
CA, San Francisco	20.0	No	10	- -	- -
Process Manufacturing					
CA, San Francisco	20.0	Yes	4	80	80
CO, Denver	20.0	Yes	<5>	1	1
CA, San Francisco	1.4	No	- -	- -	
CA, San Francisco	2.0	No	5	- -	- -
WA, Seattle	4.5	No	- -	8	- -
WA, Seattle	2.5	No	3	- -	- -
CA, San Francisco	250.0	Yes	<20>	- -	- -
CA, Los Angeles	15.0	Yes	5	0	0
Transportation					
CA, San Francisco	0.1	Yes	- -	15	- -
Wholesale Distribution					
WA, Seattle	26.0	Yes	3	- -	- -

Budget Plans for Group 3 Organizations

Table V-7 (Cont.)

INDUSTRY PRACTICE/ Location	IS Budget ($Millions)	Represents Total IS Budget (Y/N)	Growth Rate 1993 - 1994	% Spent for Outside Services: 1993	% Spent for Outside Services: 1994
FINANCIAL SERVICES					
Insurance					
WA, Seattle	5.0	No	10%	- -	- -
TELECOM					
Telecom					
CO, Denver	5.0	Yes	0	5	5
AZ, Phoenix	0.4	Yes	0	5	5
GOVERNMENT					
State & Local					
NV, Las Vegas	5.5	Yes	5	- -	- -
Education					
CA, San Francisco	30.0	Yes	10	- -	- -
WA, Seattle	1.0	Yes	- -	0	0
WA, Seattle	0.8	Yes	<5>	0	0
CA, San Francisco	0.5	No	0	2	2
WA, Seattle	0.25	Yes	<50>		
HEALTHCARE					
Healthcare					
CA, San Francisco	30.0	Yes	- -	0	0
CA, San Francisco	10.0	Yes	10	- -	- -
UTILITIES					
Utilities					
AZ, Phoenix	25.0	No	0	- -	- -
CO, Denver	10.0	Yes	0	- -	- -
AZ, Phoenix	3.0	Yes	5	20	20

REGIONAL MARKET SIZE AND FORECAST DATA

(Millions $)

PACIFIC REGION PRACTICE	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	$830	$141	$941	$74	$1,987	$924	$152	$1,059	$71	$2,206	$1,670	$357	$1,967	$149	$4,143
Discrete Mfg.	180	21	95	10	307	215	26	114	11	366	458	67	255	25	806
Process Mfg.	16	2	20	1	39	18	2	22	1	43	29	6	38	2	75
Transportation	12	2	20	1	35	14	1	23	1	39	28	6	51	3	87
Utilities	40	10	63	5	118	44	11	70	4	129	61	20	102	7	190
Telecom	11	3	26	0	39	12	2	30	0	44	26	9	66	1	102
Retail Dist.	17	3	29	3	52	19	3	35	2	59	42	11	75	7	134
Wholesale Dist.	11	2	20	1	34	12	2	22	1	37	22	6	42	2	72
Banking/Finance	24	5	38	4	70	26	4	45	3	78	58	14	98	9	179
Insurance	5	3	25	1	33	6	2	28	0	36	12	7	59	2	80
Health Services	17	4	27	2	50	18	3	31	1	53	27	9	46	2	84
Education	6	2	12	0	19	6	1	12	0	19	13	4	26	1	43
Business Services	10	6	29	3	48	13	7	36	2	58	29	18	84	7	138
Federal Gov't	417	67	435	39	958	451	71	474	42	1038	749	152	825	72	1797
State Gov't	31	5	50	3	89	36	9	58	1	104	56	13	97	5	172
Local/Misc. Gov't	32	6	52	3	93	34	6	58	2	100	59	14	101	5	179
Miscel Industries	1	0	1	0	2	0	2	1	0	3	2	1	2	0	4

(Millions $)

PACIFIC REGION PRACTICE	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$903	$2,290	$559	$3,751	$1,017	$2,461	$629	$4,107	$1,575	$3,295	$879	$5,749
Discrete Mfg.	270	654	162	1086	306	682	186	1174	482	850	263	1595
Process Mfg.	63	154	37	253	73	163	43	279	119	217	65	401
Transportation	10	27	6	44	11	28	6	45	16	37	9	61
Utilities	21	28	15	64	24	31	17	72	42	54	28	124
Telecom	41	128	26	194	47	142	30	219	91	237	62	390
Retail Dist.	9	23	5	37	11	25	3	39	14	32	7	54
Wholesale Dist.	17	45	9	71	18	48	9	75	26	63	14	102
Banking/Finance	78	197	43	319	92	222	51	365	126	265	69	461
Insurance	58	146	33	237	63	150	37	250	98	188	55	341
Health Services	13	33	7	54	14	36	8	58	23	48	12	83
Education	4	10	2	16	2	11	1	14	8	16	4	27
Business Services	21	51	11	83	24	54	13	91	34	68	17	118
Federal Gov't	110	328	93	531	119	373	99	591	136	496	84	716
State Gov't	88	218	51	358	102	233	59	394	171	341	90	603
Local/Misc. Gov't	92	227	54	373	104	243	62	409	179	356	94	629
Miscel Industries	7	19	5	31	7	20	5	32	11	27	7	45

ARIZONA (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				SI	SI SUB-MODES				SI	SI SUB-MODES				SI
Industry	Equip.	S/W	Prof. Svs.	Other	Total	Equip.	S/W	Prof. Svs.	Other	Total	Equip.	S/W	Prof. Svs.	Other	Total
Segmentation	$59	$10	$69	$5	$144	$65	$11	$77	$5	$158	$118	$26	$141	$11	$295
Discrete Mfg.	13	2	7	1	22	15	2	8	1	26	33	5	18	2	57
Process Mfg.	1	0	1	0	2	1	0	1	0	2	1	0	2	0	3
Transportation	1	0	1	0	2	1	0	1	0	2	2	0	3	0	5
Utilities	6	2	10	1	19	7	2	11	1	21	10	3	16	1	30
Telecom	1	0	2	0	3	1	0	2	0	3	2	1	5	0	8
Retail Dist.	1	0	2	0	3	1	0	2	0	3	2	1	4	0	7
Wholesale Dist.	1	0	2	0	3	1	0	2	0	3	2	1	4	0	6
Banking/Finance	2	0	3	0	6	2	0	4	0	6	5	1	8	1	15
Insurance	0	0	1	0	2	0	0	1	0	1	1	0	3	0	4
Health Services	1	0	2	0	4	1	0	2	0	3	2	1	3	0	6
Education	0	0	1	0	1	0	0	1	0	1	1	0	2	0	3
Business Services	1	0	2	0	2	1	0	2	0	3	1	1	4	0	7
Federal Gov't	25	4	27	2	58	27	0	29	3	59	46	9	50	4	109
State Gov't	3	0	4	0	7	3	5	5	0	13	5	1	8	0	14
Local/Misc. Gov't	3	1	6	0	10	4	1	6	0	11	6	2	11	1	19
Miscel Industries	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0

ARIZONA (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$67	$167	$41	$275	$76	$178	$47	$301	$118	$243	$66	$428
Discrete Mfg.	19	46	11	77	22	48	13	83	34	60	19	113
Process Mfg.	3	7	2	11	3	7	2	12	5	10	3	18
Transportation	1	2	0	2	1	2	0	3	1	2	0	3
Utilities	3	5	2	10	4	5	3	12	7	9	4	20
Telecom	3	10	2	15	4	11	2	17	7	18	5	30
Retail Dist.	0	1	0	2	1	1	0	2	1	2	0	3
Wholesale Dist.	1	4	1	6	2	4	1	7	2	5	1	9
Banking/Finance	6	16	4	26	8	18	4	30	10	22	6	38
Insurance	3	7	2	11	3	7	2	12	5	9	3	16
Health Services	1	2	1	4	1	2	1	4	2	3	1	6
Education	0	1	0	1	0	1	0	1	1	1	0	2
Business Services	1	3	1	4	1	3	1	5	2	4	1	6
Federal Gov't	7	20	6	32	7	23	6	36	8	30	5	44
State Gov't	7	18	4	29	8	19	5	32	14	28	7	49
Local/Misc. Gov't	10	25	6	40	11	26	7	44	19	39	10	68
Miscel Industries	0	1	0	2	0	1	0	1	1	1	0	2

CALIFORNIA (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	$461	$78	$512	$41	$1,092	$520	$93	$582	$45	$1,240	$950	$200	$1,092	$83	$2,326
Discrete Mfg.	124	15	66	7	212	149	18	79	8	254	316	46	176	17	556
Process Mfg.	8	1	11	1	21	9	2	12	1	24	15	3	20	1	40
Transportation	6	1	11	1	19	7	1	13	1	22	15	3	28	1	48
Utilities	18	5	29	2	54	20	5	31	2	58	28	9	46	3	86
Telecom	6	2	16	0	24	8	2	19	0	29	16	5	40	1	62
Retail Dist.	10	2	17	2	31	12	3	21	2	38	25	6	45	4	81
Wholesale Dist.	7	1	12	1	21	8	2	14	1	25	13	4	26	1	44
Banking/Finance	15	3	25	2	46	18	4	29	3	54	38	9	64	6	117
Insurance	3	2	14	0	19	4	2	17	0	23	7	4	34	1	46
Health Services	10	3	16	1	29	11	3	18	1	33	16	5	27	1	49
Education	3	1	6	0	10	4	1	7	0	12	7	2	14	0	23
Business Services	7	4	19	2	31	8	5	23	2	38	18	12	54	5	89
Federal Gov't	208	33	217	20	479	225	38	237	21	521	374	76	412	36	897
State Gov't	15	3	25	1	44	17	3	28	1	49	28	7	48	2	85
Local/Misc. Gov't	18	3	30	2	52	20	4	33	2	59	33	8	57	3	101
Miscel Industries	0	0	1	0	1	0	0	1	0	1	1	0	1	0	2

CALIFORNIA (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$538	$1,362	$330	$2,230	$610	$1,463	$378	$2,451	$941	$1,943	$524	$3,408
Discrete Mfg.	186	451	112	749	212	471	129	812	332	587	181	1100
Process Mfg.	34	82	20	136	39	87	23	149	64	116	35	215
Transportation	6	15	3	24	6	16	4	26	9	20	5	33
Utilities	10	13	7	29	11	15	8	34	19	24	13	56
Telecom	25	77	16	118	29	87	19	135	55	144	38	237
Retail Dist.	5	14	3	23	6	15	3	24	8	19	4	32
Wholesale Dist.	10	28	6	44	11	29	6	46	16	38	8	62
Banking/Finance	51	129	28	208	60	145	34	239	82	173	45	301
Insurance	34	85	19	138	37	87	22	146	57	110	32	199
Health Services	8	19	4	31	9	21	5	35	14	28	7	49
Education	2	5	1	9	2	6	1	9	4	8	2	14
Business Services	13	33	7	53	15	34	8	57	22	44	11	76
Federal Gov't	55	164	47	265	59	186	49	294	68	248	42	357
State Gov't	44	107	25	176	50	115	29	194	85	168	44	297
Local/Misc. Gov't	52	128	30	211	59	137	35	231	101	201	53	355
Miscel Industries	4	11	3	17	5	12	3	20	6	15	4	25

COLORADO (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				SI	SI SUB-MODES				SI	SI SUB-MODES				SI
Industry	Equip.	S/W	Prof. Svs.	Other	Total	Equip.	S/W	Prof. Svs.	Other	Total	Equip.	S/W	Prof. Svs.	Other	Total
Segmentation	$63	$11	$72	$6	$151	$70	$9	$80	$4	$163	$126	$27	$152	$11	$317
Discrete Mfg.	13	2	7	1	22	15	2	8	1	26	33	5	18	2	58
Process Mfg.	2	0	2	0	4	2	0	2	0	4	3	1	4	0	7
Transportation	1	0	3	0	4	2	0	3	0	5	4	1	6	0	11
Utilities	2	0	3	0	5	2	0	3	0	5	2	1	4	0	8
Telecom	1	0	3	0	4	1	0	3	0	4	3	1	7	0	11
Retail Dist.	1	0	2	0	3	1	0	2	0	3	3	1	5	0	8
Wholesale Dist.	1	0	2	0	3	1	0	2	0	3	2	1	4	0	7
Banking/Finance	2	0	3	0	5	2	0	3	0	5	5	1	8	1	14
Insurance	1	0	3	0	4	1	0	3	0	4	1	1	7	0	9
Health Services	2	0	3	0	5	2	0	3	0	5	3	1	4	0	8
Education	0	0	1	0	1	1	0	1	0	2	1	0	2	0	3
Business Services	1	0	2	0	3	1	1	3	0	5	2	1	6	1	10
Federal Gov't	33	5	34	3	75	35	6	37	3	81	59	12	65	6	141
State Gov't	2	0	3	0	5	2	0	3	0	5	3	1	6	0	10
Local/Misc. Gov't	2	0	3	0	6	2	0	4	0	6	4	1	6	0	11
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

COLORADO (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$70	$180	$43	$293	$79	$192	$49	$320	$122	$259	$68	$449
Discrete Mfg.	19	47	12	78	22	49	13	84	35	61	19	114
Process Mfg.	6	15	3	24	7	15	4	26	11	21	6	38
Transportation	1	3	1	6	1	4	1	6	2	5	1	8
Utilities	1	1	1	3	1	1	1	3	2	2	1	5
Telecom	4	14	3	21	5	15	3	23	10	26	7	42
Retail Dist.	1	1	0	2	1	2	0	3	1	2	0	3
Wholesale Dist.	2	4	1	7	2	5	1	8	2	6	1	10
Banking/Finance	6	16	3	25	7	17	4	28	10	21	5	36
Insurance	7	17	4	27	7	17	4	28	11	21	6	39
Health Services	1	3	1	5	1	3	1	5	2	5	1	8
Education	0	1	0	1	0	1	0	1	1	1	0	2
Business Services	1	4	1	6	2	4	1	7	2	5	1	8
Federal Gov't	9	26	7	42	9	29	8	46	11	39	7	56
State Gov't	5	12	3	20	6	13	3	22	10	19	5	34
Local/Misc. Gov't	6	14	3	23	7	15	4	26	11	22	6	39
Miscel Industries	1	2	1	4	1	2	1	4	1	3	1	5

IDAHO (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				SI	SI SUB-MODES				SI	SI SUB-MODES				SI
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	$11	$2	$13	$1	$27	$11	$1	$14	$1	$27	$22	$5	$26	$2	$54
Discrete Mfg.	1	0	1	0	2	2	0	1	0	3	4	1	2	0	6
Process Mfg.	1	0	1	0	1	1	0	1	0	2	1	0	1	0	3
Transportation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utilities	0	0	1	0	1	0	0	1	0	1	0	0	1	0	2
Telecom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail Dist.	0	0	0	0	1	0	0	1	0	1	1	0	1	0	2
Wholesale Dist.	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Banking/Finance	0	0	0	0	1	0	0	0	0	0	1	0	1	0	2
Insurance	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Health Services	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Education	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Business Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Federal Gov't	7	1	7	1	15	7	1	7	1	16	12	2	13	1	28
State Gov't	1	0	2	0	3	1	0	2	0	3	2	0	3	0	5
Local/Misc. Gov't	0	0	0	0	1	0	0	1	0	1	1	0	1	0	2
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

IDAHO (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$12	$31	$8	$51	$13	$33	$8	$54	$22	$45	$12	$79
Discrete Mfg.	2	5	1	9	2	5	1	8	4	7	2	13
Process Mfg.	2	5	1	9	3	6	2	11	4	8	2	14
Transportation	0	0	0	0	0	0	0	0	0	0	0	0
Utilities	0	0	0	1	0	0	0	0	0	0	0	1
Telecom	0	0	0	0	0	0	0	0	0	1	0	1
Retail Dist.	0	0	0	1	0	0	0	0	0	0	0	1
Wholesale Dist.	0	1	0	1	0	1	0	1	0	1	0	2
Banking/Finance	1	2	0	3	1	2	0	3	1	2	1	4
Insurance	1	2	0	3	1	2	0	3	1	2	1	4
Health Services	0	0	0	1	0	1	0	1	0	1	0	1
Education	0	0	0	0	0	0	0	0	0	0	0	0
Business Services	0	0	0	0	0	0	0	0	0	0	0	0
Federal Gov't	2	5	1	8	2	6	2	10	2	8	1	11
State Gov't	3	7	2	11	3	7	2	12	5	11	3	19
Local/Misc. Gov't	1	2	0	3	1	2	1	4	2	3	1	6
Miscel Industries	0	1	0	1	0	1	0	1	1	1	0	2

MONTANA (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	$10	$2	$12	$1	$24	$8	$1	$12	$1	$22	$18	$4	$22	$2	$46
Discrete Mfg.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Process Mfg.	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Transportation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Utilities	0	0	1	0	1	0	0	1	0	1	1	0	1	0	2
Telecom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail Dist.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wholesale Dist.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Banking/Finance	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Insurance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Health Services	0	0	1	0	1	0	0	1	0	1	1	0	1	0	2
Education	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Business Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Gov't	7	1	7	1	15	7	1	8	1	17	12	2	13	1	28
State Gov't	1	0	2	0	3	1	0	2	0	3	2	0	4	0	6
Local/Misc. Gov't	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MONTANA (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$8	$21	$5	$34	$8	$22	$5	$35	$14	$31	$8	$53
Discrete Mfg.	0	1	0	1	0	1	0	1	1	1	0	2
Process Mfg.	1	2	0	3	1	2	1	4	2	3	1	5
Transportation	0	0	0	0	0	0	0	0	0	0	0	0
Utilities	0	0	0	1	0	0	0	0	0	1	0	1
Telecom	0	0	0	0	0	0	0	0	0	0	0	0
Retail Dist.	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Dist.	0	0	0	1	0	0	0	0	0	1	0	1
Banking/Finance	0	1	0	2	1	1	0	2	1	1	0	3
Insurance	0	1	0	1	0	1	0	1	0	1	0	1
Health Services	0	1	0	1	0	1	0	1	0	1	0	2
Education	0	0	0	0	0	0	0	0	0	0	0	0
Business Services	0	0	0	0	0	0	0	0	0	0	0	0
Federal Gov't	2	5	1	8	2	6	2	10	2	8	1	11
State Gov't	3	8	2	13	4	9	2	15	6	13	3	23
Local/Misc. Gov't	0	1	0	1	0	1	0	1	1	1	0	2
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	1

NEW MEXICO (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				SI	SI SUB-MODES				SI	SI SUB-MODES				SI
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	$60	$10	$65	$6	$140	$62	$10	$71	$5	$148	$109	$23	$126	$10	$268
Discrete Mfg.	2	0	1	0	3	2	0	1	0	3	5	1	3	0	8
Process Mfg.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Transportation	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Utilities	1	0	2	0	3	1	0	2	0	3	2	1	3	0	5
Telecom	0	0	1	0	1	0	0	1	0	1	1	0	2	0	3
Retail Dist.	0	0	0	0	1	0	0	1	0	1	1	0	1	0	2
Wholesale Dist.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Banking/Finance	0	0	1	0	1	0	0	1	0	1	1	0	2	0	3
Insurance	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Health Services	0	0	1	0	1	0	0	1	0	1	1	0	1	0	2
Education	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Business Services	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Federal Gov't	53	8	55	5	121	57	10	60	5	132	95	19	104	9	227
State Gov't	1	0	2	0	3	1	0	2	0	3	2	0	3	0	5
Local/Misc. Gov't	1	0	2	0	3	1	0	2	0	3	2	0	3	0	6
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NEW MEXICO (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$28	$77	$20	$125	$30	$85	$21	$136	$44	$115	$25	$184
Discrete Mfg.	3	6	2	11	3	7	2	12	5	8	3	16
Process Mfg.	1	2	0	3	1	2	0	3	1	3	1	5
Transportation	0	0	0	1	0	0	0	0	0	1	0	1
Utilities	1	1	0	2	1	1	0	2	1	1	1	3
Telecom	1	3	1	5	1	4	1	6	2	6	2	10
Retail Dist.	0	0	0	1	0	0	0	0	0	1	0	1
Wholesale Dist.	0	0	0	1	0	0	0	0	0	1	0	1
Banking/Finance	1	3	1	5	2	4	1	7	2	4	1	8
Insurance	1	3	1	4	1	3	1	5	2	3	1	6
Health Services	0	1	0	1	0	1	0	1	0	1	0	2
Education	0	0	0	0	0	0	0	0	0	0	0	1
Business Services	0	0	0	1	0	1	0	1	0	1	0	1
Federal Gov't	14	41	12	67	15	47	12	74	17	63	11	90
State Gov't	3	7	2	11	3	7	2	12	5	11	3	19
Local/Misc. Gov't	3	7	2	12	3	8	2	13	6	12	3	20
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	1

NEVADA (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	**$13**	**$3**	**$18**	**$1**	**$34**	**$14**	**$1**	**$19**	**$1**	**$35**	**$25**	**$6**	**$37**	**$3**	**$71**
Discrete Mfg.	1	0	0	0	1	1	0	0	0	1	2	0	1	0	3
Process Mfg.	0	0	1	0	1	1	0	1	0	2	1	0	1	0	2
Transportation	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Utilities	2	0	3	0	5	2	0	3	0	5	2	1	4	0	8
Telecom	0	0	1	0	1	0	0	1	0	1	1	0	2	0	3
Retail Dist.	1	0	1	0	2	1	0	1	0	2	1	0	2	0	4
Wholesale Dist.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Banking/Finance	0	0	1	0	1	0	0	1	0	1	1	0	1	0	3
Insurance	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Health Services	0	0	1	0	1	0	0	1	0	1	1	0	1	0	2
Education	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Business Services	1	0	2	0	3	1	0	2	0	3	2	1	6	0	9
Federal Gov't	5	1	6	1	13	6	1	6	1	14	10	2	11	1	24
State Gov't	1	0	1	0	2	1	0	1	0	2	1	0	2	0	3
Local/Misc. Gov't	1	0	2	0	4	1	0	2	0	3	2	1	4	0	7
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NEVADA (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	**$16**	**$39**	**$10**	**$65**	**$17**	**$45**	**$10**	**$72**	**$28**	**$59**	**$16**	**$103**
Discrete Mfg.	1	3	1	4	1	3	1	5	2	3	1	6
Process Mfg.	2	4	1	7	2	5	1	8	3	6	2	12
Transportation	0	0	0	1	0	0	0	0	0	0	0	1
Utilities	1	1	1	3	1	1	1	3	2	2	1	5
Telecom	1	3	1	5	1	4	1	6	2	6	2	10
Retail Dist.	0	1	0	1	0	1	0	1	0	1	0	2
Wholesale Dist.	0	1	0	1	0	1	0	1	0	1	0	1
Banking/Finance	1	3	1	5	1	3	1	5	2	4	1	7
Insurance	0	1	0	2	1	1	0	2	1	2	0	3
Health Services	0	1	0	1	0	1	0	1	0	1	0	2
Education	0	0	0	0	0	0	0	0	0	0	0	1
Business Services	1	3	1	5	2	4	1	7	2	5	1	8
Federal Gov't	1	4	1	7	2	5	1	8	2	7	1	9
State Gov't	2	4	1	7	2	5	1	8	3	7	2	12
Local/Misc. Gov't	4	9	2	15	4	10	2	16	7	14	4	25
Miscel Industries	0	0	0	1	0	1	0	1	0	1	0	1

OREGON (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*	SI SUB-MODES				*SI*
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	$34	$6	$41	$3	$83	$38	$4	$47	$1	$90	$68	$15	$85	$6	$175
Discrete Mfg.	8	1	4	0	13	9	1	5	0	15	20	3	11	1	34
Process Mfg.	1	0	2	0	3	1	0	2	0	3	2	0	3	0	6
Transportation	1	0	1	0	2	1	0	2	0	3	2	0	3	0	6
Utilities	3	1	5	0	10	4	1	6	0	11	5	2	9	1	16
Telecom	0	0	1	0	1	0	0	1	0	1	1	0	2	0	3
Retail Dist.	1	0	2	0	4	1	0	2	0	3	3	1	5	0	9
Wholesale Dist.	0	0	1	0	2	1	0	1	0	2	1	0	2	0	3
Banking/Finance	1	0	2	0	3	1	0	2	0	3	2	1	4	0	8
Insurance	0	0	2	0	2	0	0	2	0	2	1	0	4	0	5
Health Services	1	0	1	0	2	1	0	1	0	2	1	0	2	0	4
Education	0	0	1	0	1	0	0	1	0	1	1	0	2	0	3
Business Services	0	0	1	0	2	1	0	2	0	3	1	1	4	0	6
Federal Gov't	13	2	13	1	29	14	2	14	1	31	23	5	25	2	55
State Gov't	1	0	2	0	4	2	0	3	0	5	3	1	5	0	8
Local/Misc. Gov't	2	0	3	0	4	2	0	3	0	5	3	1	5	0	9
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OREGON (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$43	$106	$26	$175	$49	$115	$27	$191	$75	$152	$42	$269
Discrete Mfg.	12	28	7	46	13	29	8	50	21	36	11	68
Process Mfg.	5	12	3	20	6	13	3	22	9	17	5	31
Transportation	1	2	0	3	1	2	0	3	1	2	1	4
Utilities	2	2	1	5	2	3	1	6	4	5	2	10
Telecom	1	4	1	6	1	4	1	6	3	7	2	12
Retail Dist.	1	2	0	3	1	2	0	3	1	2	0	4
Wholesale Dist.	1	2	0	3	1	2	0	3	1	3	1	5
Banking/Finance	3	9	2	14	4	10	2	16	5	11	3	20
Insurance	4	10	2	16	4	10	2	16	6	13	4	23
Health Services	1	1	0	2	1	2	0	3	1	2	1	4
Education	0	1	0	1	0	1	0	1	1	1	0	2
Business Services	1	2	0	3	1	2	1	4	1	3	1	5
Federal Gov't	3	10	3	16	4	11	3	18	4	15	3	22
State Gov't	4	10	2	17	5	11	3	19	8	16	4	28
Local/Misc. Gov't	4	11	3	18	5	12	3	20	9	17	5	30
Miscel Industries	0	1	0	1	0	1	0	1	0	1	0	2

UTAH (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				SI	SI SUB-MODES				SI	SI SUB-MODES				SI
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	$38	$6	$43	$3	$91	$42	$6	$49	$2	$99	$75	$16	$89	$7	$187
Discrete Mfg.	6	1	3	0	10	7	1	4	0	12	16	2	9	1	27
Process Mfg.	1	0	1	0	2	1	0	1	0	2	1	0	2	0	3
Transportation	1	0	1	0	2	1	0	1	0	2	1	0	3	0	4
Utilities	2	0	3	0	5	2	1	3	0	6	3	1	4	0	8
Telecom	0	0	1	0	2	1	0	1	0	2	1	0	3	0	5
Retail Dist.	1	0	2	0	3	1	0	2	0	3	3	1	5	0	8
Wholesale Dist.	0	0	1	0	1	0	0	1	0	1	1	0	2	0	3
Banking/Finance	1	0	1	0	2	1	0	2	0	3	2	0	3	0	6
Insurance	0	0	1	0	1	0	0	1	0	1	0	0	1	0	2
Health Services	1	0	1	0	2	1	0	1	0	2	1	0	2	0	3
Education	0	0	1	0	1	0	0	1	0	1	1	0	2	0	3
Business Services	0	0	1	0	2	0	0	1	0	1	1	1	3	0	4
Federal Gov't	22	4	23	2	51	24	4	25	2	55	39	8	44	4	95
State Gov't	1	0	2	0	4	2	0	3	0	5	3	1	5	0	8
Local/Misc. Gov't	1	0	2	0	3	1	0	2	0	3	2	1	4	0	7
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

UTAH (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$35	$90	$22	$148	$40	$97	$23	$160	$61	$132	$34	$227
Discrete Mfg.	9	22	6	37	10	23	6	39	16	29	9	54
Process Mfg.	3	7	2	11	3	7	2	12	5	9	3	17
Transportation	1	1	0	2	1	1	0	2	1	2	0	3
Utilities	1	1	1	3	1	1	1	3	2	2	1	5
Telecom	2	6	1	9	2	6	1	9	4	11	3	18
Retail Dist.	1	1	0	2	1	2	0	3	1	2	0	3
Wholesale Dist.	1	2	0	3	1	2	0	3	1	2	1	4
Banking/Finance	3	7	2	11	3	8	2	13	4	9	2	16
Insurance	1	3	1	5	1	3	1	5	2	4	1	7
Health Services	0	1	0	2	1	1	0	2	1	2	0	3
Education	0	1	0	1	0	1	0	1	1	1	0	2
Business Services	1	2	0	3	1	2	0	3	1	2	1	4
Federal Gov't	6	17	5	28	6	20	5	31	7	26	4	38
State Gov't	4	10	2	17	5	11	3	19	8	16	4	28
Local/Misc. Gov't	3	8	2	14	4	9	2	15	7	13	3	23
Miscel Industries	0	0	0	1	0	0	0	0	0	1	0	1

WASHINGTON (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				SI	SI SUB-MODES				SI	SI SUB-MODES				SI
Industry	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*	Equip.	S/W	Prof. Svs.	Other	*Total*
Segmentation	$78	$14	$91	$7	$190	$90	$16	$104	$6	$216	$152	$33	$187	$14	$385
Discrete Mfg.	12	1	6	1	21	15	2	8	1	26	31	5	17	2	55
Process Mfg.	2	0	2	0	4	2	0	2	0	4	3	1	4	0	7
Transportation	1	0	2	0	4	2	0	3	0	5	3	1	6	0	10
Utilities	5	1	8	1	15	6	2	9	1	18	8	3	13	1	25
Telecom	1	0	2	0	3	1	0	2	0	3	2	1	5	0	8
Retail Dist.	1	0	2	0	4	2	0	3	0	5	3	1	6	0	10
Wholesale Dist.	1	0	2	0	3	1	0	2	0	3	2	0	3	0	6
Banking/Finance	1	0	2	0	4	2	0	3	0	5	3	1	6	1	11
Insurance	1	0	3	0	4	1	0	4	0	5	2	1	7	0	10
Health Services	2	0	3	0	5	2	0	3	0	5	3	1	4	0	8
Education	1	0	1	0	2	1	0	1	0	2	1	0	3	0	4
Business Services	1	0	2	0	4	1	1	3	0	5	2	1	7	1	11
Federal Gov't	42	7	44	4	97	46	8	48	4	106	76	15	83	7	182
State Gov't	4	1	7	0	12	5	1	8	0	14	8	2	13	1	23
Local/Misc. Gov't	3	1	5	0	9	3	1	5	0	9	5	1	9	0	16
Miscel Industries	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0

WASHINGTON (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$81	$205	$50	$337	$91	$220	$58	$369	$142	$299	$79	$519
Discrete Mfg.	18	44	11	74	21	46	13	80	33	58	18	108
Process Mfg.	6	15	4	24	7	16	4	27	11	21	6	39
Transportation	1	3	1	5	1	3	1	5	2	4	1	7
Utilities	3	4	2	8	3	4	2	9	5	7	4	16
Telecom	3	10	2	15	4	11	2	17	7	18	5	30
Retail Dist.	1	2	0	3	1	2	0	3	1	2	1	4
Wholesale Dist.	1	3	1	5	1	4	1	6	2	5	1	8
Banking/Finance	5	12	3	19	5	13	3	21	7	16	4	27
Insurance	7	18	4	30	8	19	5	32	12	24	7	43
Health Services	1	3	1	5	1	3	1	5	2	4	1	8
Education	0	1	0	2	0	1	0	1	1	2	0	3
Business Services	2	4	1	7	2	4	1	7	3	5	1	9
Federal Gov't	11	33	9	54	12	38	10	60	14	50	8	72
State Gov't	12	30	7	49	14	32	8	54	23	47	12	82
Local/Misc. Gov't	8	21	5	34	10	22	6	38	16	33	9	58
Miscel Industries	1	2	1	3	1	2	1	4	1	3	1	5

WYOMING (Millions $)	1992 Systems Integration					1993 Systems Integration					1997 Systems Integration				
	SI SUB-MODES				SI	SI SUB-MODES				SI	SI SUB-MODES				SI
Industry	Equip.	S/W	Prof. Svs.	Other	Total	Equip.	S/W	Prof. Svs.	Other	Total	Equip.	S/W	Prof. Svs.	Other	Total
Segmentation	$4	$1	$5	$0	$10	$4	$0	$4	$0	$8	$8	$2	$10	$1	$20
Discrete Mfg.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Process Mfg.	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
Transportation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Telecom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail Dist.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wholesale Dist.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Banking/Finance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Insurance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Health Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Education	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Business Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Federal Gov't	3	0	3	0	6	3	0	3	0	6	5	1	5	0	11
State Gov't	1	0	1	0	2	1	0	1	0	2	1	0	2	0	3
Local/Misc. Gov't	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

WYOMING (Millions $)	1992 Professional Services				1993 Professional Services				1997 Professional Services			
	SUB-MODES				SUB-MODES				SUB-MODES			
Industry	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total	Cons.	Dev.	Ed & Tr	Total
Segmentation	$4	$11	$3	$18	$4	$11	$3	$18	$8	$17	$4	$29
Discrete Mfg.	0	0	0	0	0	0	0	0	0	0	0	0
Process Mfg.	1	3	1	4	1	3	1	5	2	4	1	7
Transportation	0	0	0	0	0	0	0	0	0	0	0	0
Utilities	0	0	0	0	0	0	0	0	0	0	0	0
Telecom	0	0	0	0	0	0	0	0	0	0	0	1
Retail Dist.	0	0	0	0	0	0	0	0	0	0	0	0
Wholesale Dist.	0	0	0	0	0	0	0	0	0	0	0	0
Banking/Finance	0	1	0	1	0	1	0	1	0	1	0	1
Insurance	0	0	0	0	0	0	0	0	0	0	0	0
Health Services	0	0	0	0	0	0	0	0	0	0	0	0
Education	0	0	0	0	0	0	0	0	0	0	0	0
Business Services	0	0	0	0	0	0	0	0	0	0	0	0
Federal Gov't	1	2	1	3	1	2	1	4	1	3	1	4
State Gov't	2	4	1	6	2	4	1	7	3	6	2	10
Local/Misc. Gov't	0	1	0	2	0	1	0	1	1	1	0	3
Miscel Industries	0	0	0	0	0	0	0	0	0	0	0	0

About INPUT

Since 1974, information technology (IT) users and vendors throughout the world have relied on INPUT for data, objective analysis, and insightful opinions to support their plans, market assessments, and technology directions, particularly in computer software and services. Clients make informed decisions more quickly and save on the cost of internal research by using INPUT's services.

Call us today to learn how your company can use INPUT's knowledge and experience to grow and profit in the revolutionary IT world of the 1990s.

Annual Subscription Programs

North American and European Market Analysis

Analysis of Information Services, Software, and Systems Maintenance Markets
5-year Forecasts, Competitive and Trend Analysis

- 15 Vertical Markets
- 9 Categories of Software and Services
- 7 Cross-Industry Markets
- The Worldwide Market (30 countries)

U.S.

- Outsourcing
- Client/Server
- Systems Integration
- EDI/Electronic Commerce
- IT Vendor Analysis
- U.S. Federal Government IT Procurements

European

- Outsourcing
- Systems Integration
- Customer Services

Custom Consulting

Many vendors leverage INPUT's proprietary data and industry knowledge by contracting for custom consulting projects to address questions about their specific market strategies, new product/service ideas, customer satisfaction levels, competitive positions, and merger/acquisition options.

INPUT advises users on a variety of IT planning and implementation issues. Clients retain INPUT to assess the effectiveness of outsourcing their IT operations, assist in the vendor selection process and in contract negotiation/implementation. INPUT has also evaluated users' plans for systems and applications downsizing.

INPUT Worldwide

San Francisco — 1280 Villa Street
Mountain View, CA 94041-1194
Tel. (415) 961-3300 Fax (415) 961-3966

New York — 400 Frank W. Burr Blvd.
Teaneck, NJ 07666
Tel. (201) 801-0050 Fax (201) 801-0441

Washington, D.C. — 1953 Gallows Rd., Ste. 560
Vienna, VA 22182
Tel. (703) 847-6870 Fax (703) 847-6872

London — 17 Hill Street
London W1X 7FB, England
Tel. +71 493-9335 Fax +71 629-0179

Paris — 24, avenue du Recteur Poincaré
75016 Paris, France
Tel. +1 46 47 65 65 Fax +1 46 47 69 50

Frankfurt — Sudetenstrasse 9
W-6306 Langgöns-Niederkleen, Germany
Tel. + 6447-7229 Fax +6447-7327

Tokyo — Saida Building, 4-6
Kanda Sakuma-cho, Chiyoda-ku
Tokyo 101, Japan
Tel. +3 3864-0531 Fax +3 3864-4114

M&S 459/01 4/93